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ENVIRONMENTAL ASSESSMENT BOARD

VOLUME: 200

DATE: Wednesday, May 9, 1990

BEFORE:

A. KOVEN, Chairman

E. MARTEL, Member

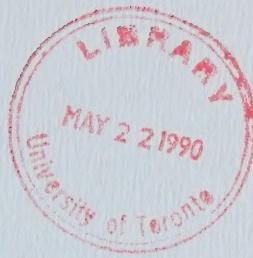
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HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL
RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR
TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental
Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental
Assessment for Timber Management on Crown
Lands in Ontario;

- and -

IN THE MATTER OF a Notice by the
Honourable Jim Bradley, Minister of the
Environment, requiring the Environmental
Assessment Board to hold a hearing with
respect to a Class Environmental
Assessment (No. NR-AA-30) of an
undertaking by the Ministry of Natural
Resources for the activity of timber
management on Crown Lands in Ontario.

Hearing held at the Environmental Assessment
Board Offices, Suite 1201, 2300 Yonge Street,
Toronto, Ontario, on Wednesday, May 9th, 1990,
commencing at 8:30 a.m.

VOLUME 200

BEFORE:

MRS. ANNE KOVEN
MR. ELIE MARTEL

Chairman
Member

A P P E A R A N C E S

MR. V. FREIDIN, Q.C.)	
MS. C. BLASTORAH)	MINISTRY OF NATURAL
MS. K. MURPHY)	RESOURCES
MS. Y. HERSCHER)	
MR. B. CAMPBELL)	
MS. J. SEABORN)	MINISTRY OF ENVIRONMENT
MS. B. HARVIE)	
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MR. R. COSMAN)	ASSOCIATION and ONTARIO
MS. E. CRONK)	LUMBER MANUFACTURERS'
MR. P.R. CASSIDY)	ASSOCIATION
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DR. T. QUINNEY)	ANGLERS & HUNTERS
MR. D. HUNTER)	NISHNAWBE-ASKI NATION
MS. N. KLEER)	and WINDIGO TRIBAL COUNCIL
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MR. R. EDWARDS)	
MR. B. MCKERCHER)	NORTHERN ONTARIO TOURIST OUTFITTERS ASSOCIATION

APPEARANCES: (Cont'd)

MR. L. GREENSPOON)	NORTHWATCH
MS. B. LLOYD)	
MR. J.W. ERICKSON, Q.C.)	RED LAKE-EAR FALLS JOINT
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MR. D. SCOTT)	NORTHWESTERN ONTARIO
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MR. J.W. HARBELL)	GREAT LAKES FOREST
MR. S.M. MAKUCH)	
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MR. G.J. KINLIN	DEPARTMENT OF JUSTICE
MR. S.J. STEPINAC	MINISTRY OF NORTHERN DEVELOPMENT & MINES
MR. M. COATES	ONTARIO FORESTRY ASSOCIATION
MR. P. ODORIZZI	BEARDMORE-LAKE NIPIGON WATCHDOG SOCIETY

(iii)

APPEARANCES: (Cont'd)

MR. R.L. AXFORD

CANADIAN ASSOCIATION OF
SINGLE INDUSTRY TOWNS

MR. M.O. EDWARDS

FORT FRANCES CHAMBER OF
COMMERCE

MR. P.D. McCUTCHEON

GEORGE NIXON

MR. C. BRUNETTA

NORTHWESTERN ONTARIO
TOURISM ASSOCIATION

I N D E X O F P R O C E E D I N G S

<u>JAMES WADDELL;</u>	
<u>MALCOLM SQUIRES;</u>	
<u>JAMES RODERICK GEMMELL;</u>	
<u>MURRAY FERGUSON;</u>	
<u>BRIAN NICKS;</u>	Resumed
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1 ---Upon commencing at 8:30 a.m.

2 MADAM CHAIR: Good morning. Please be
3 seated.

4 We have one court reporter today so we
5 are going to take a ten-minute break every hour. Is
6 that all right with the parties?

7 MS. CRONK: Thank you.

8 JAMES WADDELL;
9 MALCOLM SQUIRES;
10 JAMES RODERICK GEMMELL;
 MURRAY FERGUSON;
 BRIAN NICKS; Resumed

11

12 DIRECT EXAMINATION BY MS. CRONK (CONT'D):

13 Q. Mr. Waddell, when we broke yesterday
14 afternoon you had outlined to the Board certain
15 concerns that the Industry has with respect to the
16 nursery stock cap put in place by the Ministry of
17 Natural Resources production forecast and certain
18 silvicultural cutbacks that were introduced in 1989 and
19 1990.

20 And could I ask you with respect to the
21 evidence which you gave on those issues, generally how
22 will a new timber production policy from the Industry's
23 perspective assist in the future with respect to those
24 concerns?

25 MR. WADDELL: A. Well, the Industry

1 believes that a new timber production policy is
2 essential in order to determine the appropriate level
3 of forest or timber renewal in the province, and once
4 we have determined what the renewal, or once the
5 objectives have been identified I should say, then it
6 becomes possible to allocate the proper funding levels
7 to implement and attain the objectives.

8 Without such a policy the MNR may not be
9 able to adequately fund the required regeneration and
10 silvicultural treatments that are contemplated for the
11 Crown for both FMAs and Crown management units within
12 the area of the undertaking.

13 Q. Perhaps I could address my next
14 question to all of the members of the panel and it
15 flows from an inquiry made by the Board that gentlemen
16 made during the scoping session for Panel 8.

17 Can any of you assist as to whether there
18 have been situations of which you are aware where FMA
19 companies have invested their own funds to overcome a
20 shortfall of MNR silvicultural expenditures? Is anyone
21 aware of the situation of that kind?

22 MR. GEMMELL: A. Yes. Well, I have an
23 example which I indicated last week in the renewal
24 portion of our FMA where we use a helicopter to access
25 areas. In this case it was an area very close to the

1 mill which we cut this past winter, and the best access
2 was by what we considered to be helicopter a couple of
3 miles in.

4 We could have gone -- we could have
5 accessed it by winter road across the water crossing
6 but our decision was to access it with a helicopter.
7 We hadn't put that in our plan previously and in this
8 case we would use the helicopter and absorb the cost to
9 do that. The helicopter would be used to transport the
10 men and the container stock.

11 Q. Mr. Ferguson, I thought you were
12 reaching for the mike as well.

13 MR. FERGUSON: A. Yes. I'm right at the
14 example in 1989, Canadian Pacific on English River
15 Forest conducted some site preparation at our own
16 expense in order to accommodate stock that was due for
17 arrival in 1990. I believe the extent of that was
18 approximately 130 hectares of site preparation for
19 planning which was conducted at CP's own expense.

20 Q. Are there any other examples,
21 gentlemen?

22 MR. NICKS: A. Yes. There is an example
23 on the E.B. Eddy operations on the lower Spanish Forest
24 from last spring, spring of 1989, where a company
25 undertook the planting of two family tests which are

1 genetic tests for tree improvement under our tree
2 improvement cooperative with the MNR and two other
3 companies. And originally the company was to be
4 compensated with the MNR payment rate for tree
5 planting, but due to a shortage of tree planting funds
6 we ended up absorbing the entire cost of this
7 particular operation which was in the neighbourhood of
8 \$26,000.

9 Q. Well, Mr. Waddell, perhaps I could
10 return to you then.

11 In light of the types of concerns that
12 you've described at the Industry as having with respect
13 to the need for a new timber production policy, is the
14 Industry proposing for acceptance and approval by this
15 Board any terms and conditions relating to the issue of
16 a timber production policy?

17 MR. WADDELL: A. Yes, we are. We are
18 proposing two terms and conditions, and I would like to
19 show those to the Board at this time with an overhead.
20 If you would please, Mr. Ferguson?

21 Q. Just a minute and we'll get the
22 lights, Mr. Waddell.

23 A. These are the Industry's proposed
24 term and condition no. 93 and 94, both dealing with the
25 proposed new timber production policy. Condition no.

1 93 is that:

2 "The Ministry shall complete and submit
3 for approval a new timber production
4 policy and related implementation
5 schedule no later than November the
6 3rd -- no later than November (sic) 30th,
7 1991."

8 Proposed condition no. 94 is that:

9 "The Ministry shall determine through
10 the timber production policy an
11 appropriate level of required
12 silvicultural activity throughout the
13 entirety of the area of the undertaking
14 including management units. The Ministry
15 shall carry out or cause to be carried
16 out such renewal activities as are
17 required thereunder."

18 And Madam Chair, we believe that these
19 proposed terms and conditions are extremely important
20 as we have been trying to illustrate to you through the
21 latter part of our evidence the significance that the
22 Industry places on developing jointly with the Ministry
23 a new timber production policy that will service in the
24 years to come.

25 MS. CRONK: Madam Chair, for the record,

1 a copy of the overhead to which Mr. Waddell has just
2 referred is part of Exhibit 1148 that has been provided
3 to the Board.

4 Q. Apart from the issue of the need for
5 a new timber production policy, Mr. Nicks, as I
6 understand it you wish to outline for the Board certain
7 other factors relating to the potential enhancement of
8 renewal activities in the area of the undertaking?

9 MR. NICKS: A. Yes, that's correct.

10 Could I have an overhead, please. Thank you.

11 This overhead I believe forms part of
12 Exhibit 1147, the factors contributing to enhance
13 renewal. Firstly, as Mr. Waddell has discussed in some
14 detail, the new timber production policy. I'll go on
15 to discuss the remaining factors on the list.

16 Second being the integration of
17 harvesting and renewal. We've heard evidence on the
18 common administrative and implementing staff reporting
19 relationships. For example, in the E.B. Eddy case
20 study the reporting of the manager of fibre supply and
21 the manager of forest resources to the vice president
22 of forestry and wood products, and so on down the line.

23 The second factor, or the third on the
24 overhead, is the continuing development of harvest
25 methods and equipment to facilitate renewal. Examples

1 are improved fibre utilization through whole-tree
2 chipping; site protection through the use of wide tire
3 skidders and access provision for tertiary travel roads
4 for tree planting. And these are outlined in some
5 detail in our response to Forests for Tomorrow
6 Interrogatory No. 4.

7 The next factor is the continuing
8 development of a sense of stewardship as evidenced by
9 active programs to communicate renewal achievements to
10 the public. For example, videos, tours of woods
11 operations and mills, company publications and
12 statements of forest management policy.

13 A fifth factor would be participation in
14 tree improvement cooperatives. For example, the
15 Ontario Tree Improvement Council and the North Shore
16 Tree Improvement Cooperative. These are joint ventures
17 with MNR and other Industry companies to improve the
18 form, the wood quality, and the growth rate of the
19 native conifers, principally jack spruce and jack pine.

20 And the sixth factor contributing to
21 enhanced renewal is the establishment of forestry
22 Industry experiments in the area of cultural practices
23 to improve the survival, stocking and the growth rates
24 of confier regeneration. And a survey that I undertook
25 of six Industry companies indicated some 40 trials in

1 progress. Notable among these are intensive forest
2 management block in the northern region, joint ventures
3 with the Ministry of Natural Resources to compare wood
4 volume returns with increasing silvicultural
5 investment.

6 The second example would be the
7 assessment of ground application of liquid and granular
8 herbicides which are not currently registered for
9 aerial application; planting trials with a wide variety
10 of container stock types; the testing of the
11 effectiveness of synthetic gels preventing root
12 dehydration from bareroot stock after planting; and as
13 Mr. Squires mentioned yesterday, indoor cold storage
14 trials with container stock to extend the spring
15 planting season.

16 Other examples of forestry experiments
17 being conducted by FMA companies are experiments with
18 simultaneous application of seed during site
19 preparation with disk trenchers. This will reduce
20 seeding costs and improve the spacing of future stands,
21 and as well there are a number of trials documenting
22 the benefits of juvenile spacing including diameter
23 growth and decreasing the rotation length of dense jack
24 pine stands such as those originating from various
25 seeding.

1 Q. Can I just stop you there for a
2 moment. Those latter items that you've outlined, are
3 those all matters in which FMA companies are currently
4 engaged?

5 A. Yes, they are.

6 Q. And are those in the nature of -- do
7 they fall in the category of on-going research by the
8 companies or in some other category?

9 A. Most of them are on-going. Some of
10 the projects are, of necessity, long-term such as the
11 growth from yield experiments, so the majority would be
12 on-going.

13 Q. And how do you see these factors that
14 you've indicated on your overhead, Mr. Nicks, as being
15 related to renewal in the future?

16 A. We think that the foregoing factors
17 will contribute to the enhancement of forest renewal.
18 It's always wise to keep trying new ideas and helping
19 to improve forestry practices.

20 I think these ventures also clearly
21 demonstrate the enthusiasm and the imagination with
22 which the Industry forest managers are meeting the
23 forestry renewal challenge. So that is my conclusion
24 from these initiatives.

25 Q. Thank you.

1 Gentlemen, I would like you to provide
2 the Board, if you could, with some relative indication
3 of what your current renewal programs are just in terms
4 of -- well, let me say it hasn't escaped the attention
5 of some of us that it's the month of May and you are
6 here testifying and I would like start around the table
7 and invite each of you, if you could, to provide the
8 Board with some indication of what your companies are
9 actually doing at the present time on the renewal
10 programs both in terms of planting, seeding efforts?

11 Mr. Waddell, could we start with yours,
12 please? And I'm talking about the FMA lands.

13 MR. WADDELL: A. Yes. On our FMA lands
14 this year we will be planting 7.3 million bareroot and
15 container stock and we will be aerial seeding another
16 1,850 hectares of land.

17 Q. Is that this year, Mr. Waddell?

18 A. That is this year. Our tree planting
19 started on Monday.

20 Q. And to what lands does that apply?

21 A. That applies to the pine land FMA,
22 the Upper Spanish FMA and the lower Spanish FMA.

23 Q. Mr. Squires, can you assist the Board
24 in the same way with respect to the current renewal
25 program of your company?

1 MR. SQUIRES: A. Yes, I can, Madam
2 Chair. On the Spruce River Forest this spring we are
3 currently beginning a 4.1 million tree plant program.
4 Additionally, we have just finished aerial seeding of
5 1140 hectares and we will shortly begin ground seeding
6 an additional 250 hectares for a total of 1390 hectares
7 of seeding.

8 Q. And on what lands are those being
9 carried out?

10 A. That is on the Spruce River Forest
11 FMA.

12 Q. And if we could take it a bit out of
13 order then, Mr. Gemmell. What is Abitibi doing in your
14 area of the world this year for its renewal program?

15 MR. GEMMELL: A. The Iroquois Falls
16 Forest we begin planting trees next week, 7 million
17 bareroot and container stock. That program will last
18 until the end of June. And we have this year completed
19 500 hectares of aerial seeding. And that's our program
20 for this spring.

21 Q. Mr. Ferguson?

22 MR. FERGUSON: A. On the four FMA
23 supplying Canadian Pacific Thunder Bay mill complex,
24 our renewal program for 1990 involves the planting of
25 11,153,000 trees, primarily container, some bareroot as

1 well.

2 Our seeding program for 1990 involves the
3 seeding of 6,446 hectares and the planting is currently
4 underway starting -- some of the plants starting this
5 week and some other plants scheduled again next week.

6 Q. And on what lands are those
7 activities to be carried out?

8 A. That would be on four FMAs; those
9 four being the English River Forest, the Bright Sand
10 Forest, the Dog River-Matawin Forest and the Black
11 Sturgeon Forest.

12 Q. Thank you.

13 Mr. Waddell, in addition to the items
14 that you've outlined with respect to planting and
15 seeding, are there other components of, for example,
16 E.B. Eddy's renewal program this year that do not
17 involve artificial regeneration efforts?

18 MR. WADDELL: A. Yes, there are. We
19 have a program of natural regeneration on certain
20 areas, of course.

21 Q. Is that not the case for anyone on
22 the Panel? Mr. Ferguson, Mr. Gemmell, Mr. Squires?

23 MR. FERGUSON: A. (nods)

24 MR. GEMMELL: A. (nods)

25 MR. SQUIRES: A. (nods)

1 Q. Could I ask you then, gentlemen,
2 again as a Panel, to consider a number of other general
3 questions, and perhaps again we could go around the
4 tables, where appropriate.

5 First, as a general matter, is it
6 appropriate in your views, based on your experience
7 with renewal activities, to develop and utilize one or
8 more set prescriptions to apply across the area of the
9 undertaking for each species for which you manage?

10 Mr. Waddell, could we start with you?
11 Would that be appropriate or inappropriate in your
12 view?

13 MR. WADDELL: A. I believe it would be
14 inappropriate. As we have tried to indicate the area
15 of the undertaking as vast. There are many and diverse
16 conditions prevailing across the area of the
17 undertaking and I don't believe that it is appropriate
18 to consider one set -- one application of any technique
19 as being valid across the board.

20 I think what you are referring to,
21 Ms. Cronk, is the cookbook approach, as Dr. Baskerville
22 indicated in his report, and if that is what you are
23 suggesting to us, in my opinion it's totally
24 inappropriate.

25 Q. Let me provide you, Panel, with some

1 examples and ask for your comments.

2 Mr. Gemmell, as I understand it, based on
3 your evidence before the Board, you have been involved
4 in the course of your career in managing the black
5 spruce.

6 MR. GEMMELL: A. That's right.

7 Q. Based on your experience, is there
8 any silvicultural basis for the proposition that the
9 management of black spruce should be restricted to
10 strip cuts with strips no wider than two times the
11 height of the tree?

12 A. No, that's extremely restrictive and
13 on many of our sites it would not be successful. Just
14 as an example, the uplands clay sites are quite
15 productive and there's a great deal of competition on
16 those sites.

17 The purpose of the narrow strip cuts is
18 for natural regeneration from seed. The seed -- the
19 results from that natural seeding would be very poor
20 because of the heavy competition. So as we have put in
21 our silvicultural prescriptions, there are a number of
22 alternatives by sight because of the variation in the
23 renewal effort.

24 Q. Mr. Squires, do you have experience
25 in the course of your career in managing black spruce?

1 MR. SQUIRES: A. Yes, I do.

2 Q. Do you agree or disagree with the
3 observations just made by Mr. Gemmell?

4 A. I totally concur.

5 Q. Mr. Gemmell, still dealing with black
6 spruce. Again, based on your experience, is there, in
7 your view, any silvicultural basis for the suggestion
8 that on less productive sites the management of those
9 sites should be restricted to the use of strip cuts, in
10 this instance with strips no wider than one and a half
11 times tree height?

12 MR. GEMMELL: A. Again, even in our
13 renewal program that we illustrated to the Board last
14 week, there are a number of alternatives and all these
15 alternatives have been used and -- for renewal
16 purposes, all of them have been successful.

17 So there are a number of alternatives and
18 each alternative has good and bad points and there
19 should be flexibility to relate those programs to the
20 specific sites and conditions.

21 Q. Mr. Squires, do you agree or disagree
22 with the observations made by Mr. Gemmell?

23 MR. SQUIRES: A. I would also agree with
24 that point Mr. Gemmell has made.

25 Q. Again, based on your experience in

1 the management of black spruce, Mr. Gemmell, is there
2 any silvicultural basis for the suggestion that
3 management of that species should require involvement
4 of a minimum a 3-coupe strip system?

5 MR. GEMMELL: A. No. Again, we've
6 indicated that renewal of black spruce is excellent
7 on -- even on clearcuts. We've illustrated alternative
8 stripcuts, group seed trees and clearcuts, and in all
9 cases there have been good results. The black spruce
10 does best under full sunlight and therefore the 3-coupe
11 system is not an appropriate method.

12 Q. I would like to deal, gentlemen, with
13 a number of species. If I could turn now to white
14 spruce.

15 Mr. Nicks, do you have any experience in
16 the management of white spruce?

17 MR. NICKS: A. Yes, I do.

18 Q. Is there, based on your experience,
19 any silvicultural basis for the proposition that
20 management of that species should be conducted only by
21 the seed tree method or, again, by only the stripcut
22 method?

23 A. No, I have reservations about both
24 methods, starting with the stripcut method first.
25 White spruce rarely, in my experience, occurs in pure

1 stands so the stripcutting option is basically
2 infeasible in my experience.

3 The problem with the seed tree option is
4 that the seed crops of white spruce are periodic in
5 nature developing at intervals of five to ten years,
6 and therefore to rely on seed trees would be extremely
7 risky. There would be major harvest scheduling
8 problems in terms of anticipating a senior moving
9 equipment into the site, forming the harvest cut and
10 site preparation and moving out. Logistically, it's
11 virtually impossible.

12 The preferred approach, which we have had
13 significant success with on the pine land FMA, is that
14 of corridorizing with D7 tractors in residual white birch
15 stands where white spruce is normally found. And there
16 we simply create strips through the stand, plant white
17 spruce, bareroot stock under partial shade which it
18 requires for protection from frost and weevil, and when
19 white spruce has become established in a situation, we
20 then ground apply very carefully around each tree
21 herbicides to release the immediate competition while
22 still leaving the overstory intact. We have had
23 excellent results with this and we are getting stocking
24 which would be much higher than would be possible with
25 the seed tree method.

1 Q. Is it possible, Mr. Nicks, to
2 regenerate white spruce successfully by planting
3 efforts?

4 A. Absolutely, yes.

5 Q. Still dealing with you, Mr. Nicks,
6 could I turn to jack pine. Is there any silvicultural
7 basis in your experience for the proposition that
8 management of jack pine be restricted to the use of
9 clearcuts of less than 100 hectares in size?

10 A. No, there is no basis in my
11 experience for that statement. The proposition perhaps
12 behind the restriction of those clearcuts would be to
13 guard against the repression and growth or density,
14 say, of seeded areas and I have not seen any examples
15 of that. Mr. Ferguson, I think, clearly illustrated
16 even in a very large clearcut good success can be
17 achieved.

18 Q. Mr. Waddell, what is your view on
19 that proposition; that is, that management of jack pine
20 be restricted to the use of clearcuts of less than 100
21 hectares in size?

22 MR. WADDELL: A. I concur with what
23 Mr. Nicks has said, and in my experience in working
24 with jack pine I know of no silvicultural reason to
25 restrict the size of the cut of jack pine in terms of

1 your ability to regenerate a future crop. And I would
2 like at this time, Ms. Cronk, to quote from the
3 silvicultural guidelines from the Ministry of Natural
4 Resources, if I may.

5 Q. For?

6 A. For jack pine.

7 MS. CRONK: Madam Chair, I don't believe
8 that document has yet been marked before the Board as
9 an exhibit and I would like to tender it now, if I
10 could, as the next exhibit.

11 Do you have a copy of it, Mr. Waddell?

12 MR. WADDELL: No, I don't have a copy of
13 it, Ms. Cronk.

14 MADAM CHAIR: That will be Exhibit 1153.

15 MS. CRONK: I'm sorry, Madam Chair?

16 MADAM CHAIR: 1153.

17 ----EXHIBIT NO. 1153: Extract from the Silvicultural
18 Guideline Series from the
Ministry of Natural Resources.

19
20 MR. WADDELL: Madam Chair, as you are
21 aware, this silvicultural -- there is a Silvicultural
22 Guide Series produced by the Ministry of Natural
23 Resources sometimes with Industry involvement.

24 This particular series or this particular
25 book is for the jack pine working group and I would ask

1 if you would turn to Page 15 under 3.1, "Silvicultural
2 Systems", and with your permission I would like to read
3 the first two paragraphs:

4 "The silvics of jack pine requires a
5 type of harvesting that creates an
6 aftereffect similar to the devastation
7 following a forest fire; therefore, jack
8 pine is managed exclusively under the
9 Clearcut silvicultural system. This
10 system involves the harvesting of a
11 forest and single operation which removes
12 most of the vegetation from the area and
13 creates the ideal conditions for the
14 establishment and survival of a new
15 natural or artificially regenerated
16 forest crop. The Boreal Forest, for
17 example, is a generally homogeneous
18 forest of even-aged stands of
19 intolerant coniferous or deciduous
20 species which is best managed using the
21 Clearcut system.

22 "Since the last glacial period,
23 extensive fires have swept this forest
24 about every 100 to 150 years continually
25 - recreating the ideal growing conditions

for its regeneration. Clearcut logging disturbances can create similar growing conditions for regeneration."

I think that puts our situation very succinctly. In our opinion, and obviously in the opinion of the authors of this particular Silvicultural Guide Series for jack pine, we believe that the clearcut system is the proper silvicultural system for the renewal of jack pine and there is no biological reason, in our opinion, that the size of the clearcut should be limited for renewal purposes.

12 MS. CRONK: Q. Mr. Ferguson, based on
13 your experience in the management of jack pine, first,
14 do you agree or disagree with the observations
15 expressed by Mr. Waddell.

16 MR. FERGUSON: A. I would have to agree
17 totally.

Q. Based on your own experience, is there anything you wish to add?

20 A. My own experience has been that I
21 have no recollection of any observation whereby the
22 renewal of jack pine has been adversely effected by the
23 size of the clearcut. If anything, the smaller
24 -- clearcuts and jack pine may have some problems in
25 re-establishing the jack pine; the larger clearcuts

1 simply do quite well.

2 Q. Mr. Nicks, if I could return to you.

3 Still dealing with jack pine, based on your experience,
4 is there any silvicultural basis in your view for the
5 proposition that if full-tree harvesting methods are
6 used with respect to jack pine, that management of that
7 species should be restricted to the use of strips no
8 wider than two times the tree height?

9 MR. NICKS: A. I can think of no basis
10 for that recommendation. We've been using full-tree
11 harvesting in our limits for -- well, since before I
12 arrived with the company anyway, which was five years
13 ago. And in my previous experience with the MNR,
14 full-tree harvesting was used for jack pine starting
15 about 1980 and we have had very successful results in
16 both areas in terms of either planting or seeding jack
17 pine.

18 Q. Mr. Waddell, do you agree or
19 disagree? What is your view on that proposition that
20 I've put to Mr. Nicks?

21 MR. WADDELL: A. Identical to the
22 opinions expressed by Mr. Nicks. I feel that in most
23 areas, particularly in northeastern region and then in
24 the northern region, any type of natural regeneration
25 for jack pine has proven to be somewhat unsuccessful,

1 and, again, I would like to quote from Exhibit 1153,
2 page 20, about the eighth line down beginning with the
3 indented paragraph.

4 "The Ministry, northern and
5 northeastern region have had little
6 success with natural regeneration.

7 Results, however, as one moves westward
8 across the province improves."

9 And that has certainly been our
10 experience in the northern and northeastern region. It
11 is extremely difficult to get natural regeneration to a
12 proper level and by inhibiting the size of your
13 clearcut is only going to make it more difficult.

14 Q. Mr. Nicks, have you had experience in
15 the management of the white pine?

16 MR. NICKS: A. Yes, I have.

17 Q. Mr. Murray, have you as well?

18 MR. MURRAY: A. Yes, I have.

19 Q. Mr. Nicks, starting with you, based
20 again on your own experience, is there any
21 silvicultural basis for the proposition that management
22 of white pine should be restricted to the use of
23 uniform shelterwood cuts?

24 MR. NICKS: A. Not as a uniform
25 approach. It's certainly a valuable system in certain

1 areas, principally, where there is sufficient basal
2 area or stocking of white pine to begin with,
3 relatively pure stands of one that is documented in the
4 MNR's silvicultural guide for red and white pine as
5 well.

6 The situation on our FMA's through most of
7 the northern part of the area of the undertaking is the
8 white pine occurs on ridge tops and as scattered
9 individuals or in clumps, and there is not the canopy
10 of white pine there to practice uniform shelterwood
11 with, so one must utilize alternative methods which can
12 also be quite successful.

13 For example, in our lower Spanish Forest,
14 we have a policy for managing white pine, the white
15 pine working group. We -- the intention being --
16 potentially leave a minimum of 25 white pine seed trees
17 per hectare and in other stands with a white pine
18 component we harvest on a diameter limit, a
19 40-centimetre diameter limit on white pine to make sure
20 that there is a component of white pine in the
21 resulting stand. We also grow and plant 100,000 red
22 pine per year on the lower Spanish and starting next
23 year we'll be growing 50,000 white pine as well in the
24 lower Spanish Forest.

25 Q. Thank you, Mr. Nicks.

1 Mr. Murray, based on your experience in
2 the management of white pine, what is your opinion as
3 to whether there is any silvicultural basis for the
4 proposition that management of white pine should be
5 restricted to the use of uniform shelterwood cuts?

6 MR. MURRAY: A. In my opinion, I agree
7 with Mr. Nicks. My experience in the Sioux Ontario
8 region would reinforce his comments about the leaving
9 of scattered trees for a seed tree on a diameter or on
10 a selected seed tree system, and I agree with what he
11 has said, yes.

12 Q. Mr. Nicks, you mentioned red pine in
13 the course of your remarks regarding the management of
14 white pine. Do you as well have experience in the
15 management of red pine?

16 MR. NICKS: A. Yes, I have some
17 experience, not a great deal.

18 Q. Mr. Ferguson, do you have experience
19 in the management of red pine?

20 MR. FERGUSON: A. Yes, some through the
21 activities of third party operation -- on the
22 activities of a third party operator on the English
23 River Forest.

24 Q. Mr. Ferguson, then, if I could put
25 - the question initially to you: Would it be appropriate

1 in your view on a silvicultural basis for the
2 management of red pine to be restricted to the use of
3 uniform shelterwood cuts?

4 A. No, I would not agree that that would
5 be appropriate in all cases. I am aware of several and
6 very successful plantations of red pine in northwestern
7 Ontario, very successful particularly on the Dryer
8 site.

9 I'm also aware of the leaving of seed
10 trees with some site preparation near the base of the
11 seed trees and very successful red pine regeneration
12 through that method as well. I would say that the
13 shelterwood methods would be inappropriate in some
14 cases.

15 Q. Mr. Nicks, based on the experience
16 which you have had -- I recognize that you indicated it
17 was limited -- do you agree or disagree with the
18 observations made by Mr. Ferguson?

19 MR. NICKS: A. I agree completely.

20 Q. Could I turn to poplar, gentlemen.

21 Mr. Waddell, have you had experience
22 managing for poplar in the area of the undertaking?

23 MR. WADDELL: A. Yes, I have.

24 Q. Is there, in your experience, any
25 silvicultural basis for the proposition that managing

1 for -- that in the management of poplar, the use of
2 clearcuts should be restricted to clearcuts of less
3 than 50 hectares in size?

4 A. If your objective is to renew a crop
5 of poplar, there is no validity in such a statement.
6 The problem in most cases is to try to keep the poplar
7 back, and the size of the clearcut has absolutely
8 nothing to do with the renewal. In fact, the larger
9 the clearcut probably the better the renewal of poplar
10 you'll get as it is a sun-loving species and it comes
11 in very vigorously following a cut-over.

12 So, no, the size of the cut would not
13 impede the growth -- the regrowth and the suckering of
14 poplar in any way.

15 Q. I have in mind the nature of the case
16 study, Mr. Waddell, that you and Mr. Nicks described to
17 the Board, and on blocks A to D of that case study, you
18 were not managing for poplar.

19 Within E.B. Eddy FMA areas have you had
20 and do you have personal experience in managing for
21 poplar as opposed to jack pine?

22 A. On some sites that are mixed with
23 stands to begin with that are similar to the blocks in
24 the case study where we judge that the amount of
25 residual poplar is very high following the removal of

1 the softwood, we allow that area to regenerate
2 naturally back to poplar and there is no problem
3 whatsoever in regenerating those areas to poplar
4 regardless of how large the cut may be.

5 Q. My next question, gentlemen, pertains
6 to tolerant hardwoods, and, Mr. Murray, it will come as
7 no surprise to you that the question is directed to
8 you.

9 Is there, based on your experience, any
10 silvicultural basis for the proposition that the
11 management of tolerant hardwoods should be restricted
12 in all cases to the use of shelterwood or selection
13 cutting, those two?

14 MR. MURRAY: A. Ms. Cronk, the tolerant
15 hard wood -- the uniform and shelterwood system are the
16 preferred specie in the -- the preferred silvicultural
17 system. There is no silvicultural basis for a
18 statement that they should be the only method of
19 treatment of the tolerant hardwood.

20 There are cases in the tolerant hardwood
21 where the stand will not meet the criteria for
22 selection and/or uniform shelterwood management, and in
23 those cases the forester identifying the correct
24 management system must have the flexibility of, in this
25 case, utilizing the clearcut system which would -- for

1 which the tolerant hardwood can be adapted and a
2 successful forest regenerated.

3 So I have to say that the clearcut system
4 is one that must be one of the options in the
5 management of a tolerant hardwood.

6 Q. My next question pertains to site
7 preparation and scarification. Mr. Nicks, you
8 presented certain evidence to the Board regarding the
9 Industry's involvement in site preparation activities
10 in the area of the undertaking.

11 If it were proposed that site preparation
12 be limited in the future to soils over three feet in
13 depth, would you regard that as appropriate or
14 inappropriate from a silvicultural perspective?

15 MR. NICKS: A. I would regard that as
16 highly inappropriate. For one thing, it would restrict
17 the amount of land base available to regenerate and
18 have serious wood supply consequences.

19 From a biological standpoint, I can think
20 of no reason to limit site preparation on the basis of
21 a depth of three feet or one metre. The significant
22 aspect of soils, I believe, is texture and slope in
23 regard to site preparation, not depth.

24 A shallow soil which is level and sandy
25 can be site prepared quite effectively with minimal

1 impact using patch scarifiers or disk trenchers so I
2 think it is an overly restrictive rule to suggest.

3 Q. If I substituted the word
4 "scarification" for the word "site preparation" in that
5 question, would your views be different in any way?

6 A. Well, my understanding of the term
7 scarification and I think one that is used -- the
8 understanding in the forestry community is that it
9 involves -- it's a subset of site preparation activity
10 in that it usually implies natural regeneration to
11 follow.

12 For example, scarification of jack pine
13 for natural involves site preparation with drags to
14 expose mineral soil and to draw the hole bearing slat
15 back over the exposed furrows. So the two aren't
16 really synonymous in my mind.

17 The same comments would apply to
18 scarification as I provided regarding site preparation.

19 Q. Dealing with regeneration, generally,
20 Mr. Squires, you presented evidence to the Board with
21 regard to the Industry's perspective on regeneration
22 options if it were proposed that regeneration should in
23 the future have, as its purpose, the achievement of
24 stands equal to or superior to the stands harvested
25 with respect to species and density. Would you regard

1 that as appropriate or inappropriate? Are you clear on
2 the question?

3 MR. SQUIRES: A. I think I am. You can
4 help me rephrase it.

5 Q. If it were proposed that regeneration
6 in the future have as its purpose be intended to
7 achieve stands equal to or superior to the stands
8 harvested with respect to species and density, would
9 you regard that as appropriate or inappropriate?

10 A. I'm going to ask you to rephrase it
11 because I read it --

12 Q. Sorry. It occurred to me as I put
13 the question to you that it wasn't as clear as it might
14 have been. So let me put it again.

15 If it were proposed that in the future,
16 regeneration should have as its purpose the achievement
17 that stands equal to or superior to the stands
18 harvested with respect to the species and density,
19 would you regard that as appropriate or inappropriate
20 based on your experience with regeneration?

21 A. Ms. Cronk, I have difficulty with any
22 prescription that restricts me in any regard. I prefer
23 to approach any situation on the basis of the site and
24 the stand and make any prescription according as to
25 what is found out there in the bush. So in that

1 regard, I'm still having problems with the question.

2 Q. I would ask you to accept this
3 hypothetical for a moment, Mr. Squires. When you go in
4 and harvest a stand as an Industry timber manager, the
5 stand has certain characteristics in terms of species
6 that are present and in terms density. Do you accept
7 that?

8 A. Yes.

9 Q. If I were to suggest to you or if
10 someone else were to suggest to you that in the future
11 when you regenerate that stand which you harvested, the
12 object of your regeneration should be to match or
13 improve on what was originally there in terms of
14 species and density.

15 What would your views as a forester be as
16 to whether that is an appropriate objective of
17 regeneration?

18 A. Personally, I don't think it's
19 appropriate in that, again, as I said, I am too
20 restricted in that regard.

21 If I'm asked to regenerate that stand
22 according to a particular species -- height, yield --
23 yes, I can do it, but I'm having problem with the
24 motive.

25 Q. Mr. Nicks, what is your view of that

1 proposition?

2 MR. NICKS: A. Well, I'm having the same
3 difficulty in the sense that it's not wise necessarily
4 to allocate resources equally to all sites or to
5 improve the level of production on all sites. To me,
6 it makes much more sense to improve the yield and the
7 investment on sites which are productive, the most
8 productive, and the sites that are less productive, it
9 may be inappropriate.

10 As Mr. Waddell has indicated, where there
11 is a heavy poplar residual component, to expend large
12 sums of money to improve the yield of jack pine, it may
13 not be necessary in wood supply scenario for the
14 management unit.

15 Q. Thank you.

16 And, Mr. Waddell, if I could put another
17 general proposition to you. If it were proposed that
18 for plantations particularly -- let's deal in
19 particular with plantations. If it were proposed that
20 the collection of survival data five years after
21 planting be mandatory in light of the evidence you've
22 given to the Board, would that be, in your view,
23 appropriate or inappropriate?

24 MR. WADDELL: A. I suppose, Ms. Cronk,
25 it depends upon what the purpose of the collection of

1 the data is, but from a silvicultural purpose, I feel
2 that would be inappropriate.

3 I don't think, as we have tried or I have
4 tried to outline on behalf of the Industry, I think the
5 mandatory imposition of any requirement for survival
6 data tied to a year is inappropriate for the reasons
7 that we have tried to outline, and basically they are
8 that each manager has different needs, different
9 concerns and he collects -- he should be allowed to
10 have the flexibility to collect the survival data at a
11 time that best fits the particular needs that he has on
12 that particular site at that particular time, and,
13 therefore, I would have to suggest to you that
14 fifth-year collection on a mandatory basis of survival
15 data would be inappropriate.

16 There may be particular managers at a
17 particular time that would want to do it, and that is
18 fair enough in their particular case, but on a
19 mandatory basis across the area of the undertaking, no,
20 in my opinion, it would be inappropriate.

21 MR. MARTEL: Could I ask a question?

22 MS. CRONK: Certainly.

23 MR. MARTEL: To satisfy the public,
24 Mr. Waddell, who have invited a concern in the money
25 being spent and who wants some form of knowledge of

1 what is going on out there, out in the forest, how do
2 you resolve satisfying their concerns about the money
3 they are spending in order to have a proper
4 regeneration if we don't -- not some form of a
5 mechanism for reporting to them as to what in fact is
6 occurring? And that is a real concern, I think, of
7 people.

8 MR. WADDELL: Yes, Mr. Martel, I
9 certainly recognize your point.

10 I would suggest that if we could put it
11 in terms of acres of successful regeneration, that that
12 might be an appropriate reporting mechanism; in other
13 words, at the end of the fifth year when we do our
14 stocking assessments and we all have formally agreed to
15 stocking requirements in our FMAs and the ground rules.
16 For example, if E.B. Eddy could report that or was
17 required to report that in 1990 our fifth-year stocking
18 assessments were completed and we have successfully
19 regenerated 5,000 hectares of the 5,120 that we
20 attempted to do, would that answer the concerns of the
21 public?

22 MR. MARTEL: Well, I think it goes some
23 way, but, again, you are dealing with a lay public.
24 Having listened to two years of evidence, I have a
25 little better knowledge than I had two years ago what

1 is going on out there, but to the lay public it's going
2 to have to be in terms that they understand, and I'm
3 not sure stocking densities mean a whole lot to them,
4 or survival.

5 There has got to be some form of
6 mechanism, I think -- that's a personal opinion at this
7 stage of the game -- that indicates to the public the
8 success rate. Without that, I think that you'll have a
9 public that is suspicious always.

10 MR. WADDELL: You indicated success rate,
11 though. Could I try once more to suggest that if the
12 stocking standards were agreed to as they are now up
13 front, and provided that the FMA company attains those
14 standards at the end of year five, then we
15 collectively, the Industry, the Ministry and the
16 public, would agree that those acres would have been
17 successfully regenerated. Would that answer the
18 concern of the public?

19 MR. MARTEL: Well, I think if you give
20 the public something that says; Well, we've achieved a
21 40 per cent stock in density -- I guess that's the term
22 you want to use -- and that has been successful, or it
23 is considered successful, I don't think the public, on
24 what it has at the present time would look at that and
25 say it's successful. They would say: Wait a minute,

1 what's happened? Just thinking the way the public
2 would think, they are going to say: What has happened
3 to the other 60 per cent?

4 From my vantage point, at least, that
5 would be the first question that would come to their
6 mind. If it's only 40 per cent, and again it's a case
7 of maybe education, but if you are saying it's --
8 you've achieved 40 per cent and that's what MNR has
9 determined it has to be, that you are going to have a
10 public that is going to be cynical because they are
11 going to say look -- just in pure mathematical terms,
12 they are going to say: What has happened to the other
13 60 per cent.

14 MS. CRONK: Mr. Martel, if I could,
15 perhaps in an effort to assist, would pursue this in an
16 evidentiary way with further questions to Mr. Waddell
17 and the other panel members, and I would point out,
18 sir, that the concern you've expressed is going to be
19 addressed both in argument and by the Industry's
20 planning panel in an evidentiary sense. You will be
21 hearing future evidence from this party on that issue
22 on how those concerns are to be met before the end of
23 the day.

24 Q. But, Mr. Waddell, addressing the
25 point that Mr. Martel has raised, do you, based on your

1 experience in the area of the undertaking both in
2 managing the timber resource and dealing with the
3 public in the course of doing that, do you support the
4 need for keeping the public informed as to the success
5 rate of what the Industry is doing in the area of the
6 undertaking?

7 MR. WADDELL: A. I would have to ask you
8 to define what the success rate is, Ms. Cronk, because
9 I'm not sure what you mean by that success rate.

10 Q. Maybe I deserved that.

11 Just as a general proposition,
12 Mr. Waddell, in terms of the performance by the
13 Industry of its obligations under the FMA program, do
14 you support the concept that that information; that is,
15 whether performance has been successful or not in terms
16 of the FMA program should be made available to the
17 public, or can you answer it on that general basis?

18 A. Absolutely. I think I can speak on
19 behalf of the Industry on that. It is public lands
20 that we are working on and we have taken a contractual
21 obligation to reforest the productive forest lands and
22 we are doing that. I think what we are talking about
23 here is the measure of how we report that.

24 Q.- And with respect to the suggestion
25 that a measure of reporting should be the mandatory

1 collection and reporting of survival data, was your
2 evidence directed to the forester's perspective on the
3 usefulness of that data or on the issue of what are
4 appropriate reporting mechanisms, or were you talking
5 about both? What was your evidence focused on with
6 respect to survival data?

7 A. Well, I'm going to have to be like
8 Mr. Squires and ask you to rephrase that question,
9 please.

10 Q. When you gave your evidence to the
11 Board with respect to the usefulness of survival data,
12 were you looking at it from the perspective of
13 usefulness in terms of what the information means or
14 -were you thinking about it in terms of a reporting
15 mechanism or both?

16 A. I was essentially speaking --
17 outlining the Industry's concerns about the mandatory
18 collection of second year, specifically second year
19 survival data, in terms of its usefulness from a
20 forester's viewpoint in measuring the relative success
21 of a plantation. I was not particularly speaking about
22 it or referring to it as a measure of how the Ministry
23 or how the Industry might report to the public.

24 MS. CRONK: Mr. Martel, I propose to
25 leave it there and deal with it further. I propose to

1 leave it there and to deal with it further for our part
2 with the planning witnesses who will be appearing
3 before you.

4 MR. MARTEL: That's fine. It's just a
5 concern I have.

6 MS. CRONK: Your concerns are our
7 concerns.

8 MADAM CHAIR: One question for
9 Mr. Waddell, Ms. Cronk, and that is: You've just gone
10 over your reasons why you don't see second year
11 survival data as being particularly useful as a
12 mandatory provision, and I assume that you would see
13 them less used for fifth year survival data in the
14 -sense that they would be redundant because of the
15 stocking information that you collect anyway?

16 MR. WADDELL: That's partially true, and
17 as we've indicated earlier the survival in the fifth
18 year probably would be only slightly less than the
19 survival in the second year and there is a logistics
20 problem in maintaining your survival plots from year
21 two to year five in that each individual tree has to
22 depend and identify in some manner, and when you come
23 back there in year five it's often very difficult on a
24 large scale basis to find those individual trees and,
25 of course, if you don't find them all then you are

1 sample loses some of its validity.

2 People have been known to go through and
3 pull out your pins, for example, animals sometimes
4 disturb them. So over a five-year period it's that
5 much more difficult to maintain the accuracy of your
6 sample.

7 MADAM CHAIR: Thank you.

8 MS. CRONK: Q. Mr. Squires, yesterday
9 there was a question raised concerning the suggestion
10 of a three-million surplus in seedlings in the area of
11 the undertaking. Was there a surplus of three-million
12 seedlings that you are aware of?

13 MR. SQUIRES: A. The question was coming
14 from Mr. Martel, I believe, and got into the press.
15 That was quoted in the press, but I personally believe
16 that the number was probably expected, and I did have
17 communication at that time with the district manager at
18 Thunder Bay and queried him about the "surplus", and
19 his reaction to me was that this was not a surplus,
20 there were trees in the nursery that had been carried
21 over year and he described them as 'feet tall', meaning
22 they are much too large. So they would be just
23 "surplus", but not useful.

24 Additionally, there were some trees that
25 were undersize as a part of normal nursery routine.

1 These are seedlings that are in seedbeds and that would
2 be ordinarily scheduled for putting into transplant
3 beds, but because they have had a particularly good two
4 years in a row for survival in seebeds, they have
5 "surplus" in that area and there was no point in
6 transplanting them, to spend additional money on them.

7 Q. And that was in, you say, Thunder
8 Bay?

9 A. Yes, that was in Thunder Bay.

10 Q. When was that?

11 A. That was the spring of 1989.

12 Q. Mr. Waddell, could I turn then
13 finally to you, sir, and ask whether there are any
14 concluding observations on behalf of the Panel which
15 you wish at this time and ask whether there are any
16 concluding observations at this time which you wish to
17 offer to the Board on behalf of the Panel with respect
18 to the involvement of the Industry in the renewal
19 activities in the area of the undertaking?

20 MR. WADDELL: A. Yes, Madam Chair. On
21 behalf of our Panel I would like to make a concluding
22 statement at this time.

23 In 1980, the first forest management
24 agreements initiated the transfer of timber management
25 responsibilities including renewal to the Industry. An

1 analysis of the results of the renewal activities
2 conducted by the forest management agreement holders in
3 1988 indicates clearly that the program has been a very
4 successful one, particularly where artificial
5 regeneration methods have been used.

6 It is therefore the position of the
7 Industry that our obligations under the terms of the
8 forest management agreements to keep production forest
9 lands reforested in accordance with the ground rules
10 are being met.

11 It is also our contention that Industry
12 staff have proven their competence and their commitment
13 to the challenge of reforesting harvested lands despite
14 the wide variety of sites and conditions that we deal
15 with across the area of the undertaking.

16 It is also our contention that this rapid
17 and successful regeneration is beneficial to all users
18 and to all needs. The Industry is confident of its
19 continued ability to successfully conduct renewal
20 activities in the future. However, we believe that our
21 continued ability to do so is contingent upon three
22 factors, and I would like to outline these to you with
23 an overhead.

24 If you would, please, Mr. Ferguson.
25 Our ability to successfully conduct

1 timber renewal activities in the future will depend
2 upon three critical factors.

3 First of all, as we have stressed, the
4 early development with Industry participation of a new
5 timber production policy and implementation schedule
6 that will show what we will do and when.

7 Secondly, there must be an assurance of
8 adequate and continuous renewal funding by the
9 government.

10 And, third, certainly not the least
11 important, is the maintenance of the timber manager's
12 flexibility to continue to make informed, site-specific
13 renewal decisions that best suit that particular site.

14 Those are our Panels' concluding remarks,
15 Madam Chair. Thank you.

16 MS. CRONK: Thank you, Mr. Waddell.

17 Madam Chair, Mr. Martel, that concludes
18 the direct evidence of this Panel and questioning from
19 me. There is, however, one other matter that I wish to
20 deal with on behalf of the OFIA/OLMA at this time in
21 response to a question that was raised during the
22 scoping section for Panel 8.

23 The question was raised by the Board at
24 that time whether the OFIA/OLMA will be presenting
25 evidence at this hearing regarding the timber

1 production capacity of the area of the undertaking as
2 set out and with reference to the 1972 forest
3 production policy. The Board will recall issue being
4 raised.

5 I understood the question then and now to
6 relate to the volume target, the productive capacity of
7 the area of the undertaking set out in that 1972
8 policy, and there was discussion at that scoping
9 session, reference was made to the 9.1 million cunits
10 referred to by the year 2020 in the 1972 forest
11 production policy.

12 I wish to outline and to advise the Board
13 at this time the position of the OFIA/OLMA on this
14 matter.

15 It is first for the assistance of the
16 Board, to remind the Board that you have received some
17 evidence on this issue already from Industry witnesses,
18 namely, Mr. Nick Sultarelli on Panel 3, and I would,
19 for your future assistance, refer you to portions of
20 the transcript of Mr. Sultarelli's evidence beginning
21 at pages 32,950 and following, and 33,234 and
22 following. I have some difficulty getting 32,000 and
23 33,000 out of my mouth when I refer to a transcript,
24 but those are the pages that follow -- 32,950 and
25 33,254 and following.

1 That is a portion of Mr. Sultarelli's
2 evidence in-chief to Mr. Cassidy and a portion of his
3 cross-examination evidence with Mr. Lindgren, but I
4 wish to be of as much assistance to the Board as I can
5 and make the position of the OFIA/OLMA clear on this
6 issue.

7 The associations which we represent,
8 Madam Chair, Mr. Martel, are not in a position to
9 assist you on a provincial production number and that
10 is not -- that is factually the case and I say that to
11 you in light of the following facts: First, as the
12 Board, of course, is aware, there are members of the
13 sawmill and pulp and paper industry that are not
14 members of the OFIA/OLMA. That is the first matter.

15 Secondly, and perhaps of greater
16 importance in this context, the Industry is not
17 responsible for wood supply and timber management
18 activities throughout the entirety of the area of the
19 undertaking. You've now received evidence, and I make
20 no comment on it, but you have received evidence
21 regarding the Industry's role with respect to Crown
22 management units, for example.

23 They cannot give you evidence, factually
24 or otherwise, with respect to experience across the
25 whole of the area of the undertaking. That is the

1 function of the government agency who bears
2 responsibility, in our submission, for management of
3 the entirety of that resource. And you have heard Mr.
4 Sultarelli's evidence about the objective of the timber
5 production policy, the new one, as Industry sees it.
6 You've now received evidence as to why these witnesses,
7 the Ministry perceives them as necessary.

8 And so the answer to the question raised
9 by the Board is: I can only reaffirm as counsel that
10 certain of the matters that were outlined to you by
11 Mr. Sultarelli and to indicate with respect to the 1972
12 forest production policy and the total productive
13 capacity of the entirety of the area of the
14 undertaking, the question is directed to the wrong
15 party.

16 I regret that that is the case and I wish
17 the Board to know that so there was a response before
18 you on all questions posed to you before this direct
19 examination concluded.

20 I don't know whether the Board wishes now
21 to rise in light of what you told me with respect to
22 the reporter at the beginning of the morning, Madam
23 Chair, but that does conclude the questions I have.

24 MADAM CHAIR: Yes. Thank you for your
25 comments, Ms. Cronk, on that.

1 So presumably when the OFIA participates
2 with the Ministry of Natural Resources in some fashion
3 in designing and developing the new timber production
4 policy, they won't have anything to do with setting a
5 numerical target in terms of what that capacity will
6 be.

7 MS. CRONK: I didn't say that and I don't
8 know that, Madam Chair. I can tell you that it's
9 certainly -- the Industry does not regard it as its
10 business nor its expertise to set an overall provincial
11 target, it cannot do so.

12 You should, perhaps in this context,
13 consider the matter and in many instances individual
14 companies know what their needs are, but they have no
15 idea what factors are going to influence that supply in
16 the future.

17 There is a whole combination of factors,
18 and I certainly don't purport to be, in responding to
19 your question, a wood supply expert, and you can pursue
20 this, if you wish, with these witnesses.

21 I can tell you that Industry wishes to be
22 involved because they have a perspective, and based on
23 their experience they hopefully will have a
24 contribution to make in finalizing that policy.

25 To put the matter in the way that you

1 have, they won't be setting any professional targets,
2 they can't.

3 MADAM CHAIR: I think what the Board has
4 to take from the evidence of this Panel in terms of
5 renewal is that regardless of the level of harvesting
6 activity or renewal in the future, your Panel's
7 evidence to date is that the current level of renewal
8 funding is insufficient?

9 MS. CRONK: That's correct, Madam Chair.

10 MADAM CHAIR: And that is what we'll take
11 from that.

12 MS. CRONK: There may be other things
13 that we will ask you at the end of the day to take from
14 this evidence when you have heard it all, but certainly
15 that is an element of it.

16 I can only say that I hope the Board
17 understands the factual reality of the difficulty of
18 the Ministry coming before you with an estimation of
19 that kind of a number when they lack the information to
20 provide it.

21 MADAM CHAIR: All right. Thank you, Ms.
22 Cronk.

23 MS. CRONK: Thank you.

24 MADAM CHAIR: Ms. Swenarchuk, how much
25 time do you need to -- is 10 minutes enough or would

1 you like a 20-minute break at this point?

2 MS. SWENARCHUK: We would normally have
3 it at ten o'clock.

4 MADAM CHAIR: Let's take a 20-minute break
5 now and we'll have a 10-minute break before noon at
6 some point for the court reporter. Thank you.

7 ---Recess at 9:42 a.m.

8 ---On resuming at 10:04 a.m.:

9 MADAM CHAIR: Please be seated.

10 Ms. Swenarchuk?

11 I think given the closeness of this room
12 that we can do away with our jackets and make ourselves
13 comfortable for the rest of the day.

14 ---Discussion off the record.

15 MS. SWENARCHUK: To begin, Madam Chair,
16 you will recall that Mr. Nicks referred to a study
17 yesterday with regard to clearcut size and I asked the
18 study be produced to me. It was, but it didn't arrive
19 at my home until 11:30 last night.

20 I believe as soon as they received it, I
21 received it, but it was that late. And so, of course,
22 I haven't had an opportunity to discuss this with the
23 consultant and I'm simply requesting with regard to
24 that study I be permitted to return to it probably
25 tomorrow, I would expect; otherwise the issue today --

1 and ask any additional questions of Mr. Nicks that
2 arise from that statement particularly.

3 MADAM CHAIR: Yes. That's fine,
4 Ms. Swenarchuk. We discussed last night the fact that
5 this Panel will probably not be completed until next
6 Monday evening or perhaps early Tuesday morning with
7 re-examination.

8 MS. CRONK: I understood, Madam Chair, at
9 least it's been reported to me what occurred at the
10 scoping section, and I'm in some difficulty because
11 I've not had any communication from the Anglers &
12 Hunters. I did receive a letter -- today. My hope is
13 this Panel will be completed on Monday, is what I wish
14 to say to the Panel, but I don't know what it is they
15 are intending to pursue, so we are planning on Monday
16 and Tuesday morning, if necessary.

17 My hope is we will be recalling the
18 attending Panel sometime Monday afternoon and we are
19 working toward that objective.

20 MADAM CHAIR: And so, Ms. Swenarchuk,
21 tomorrow you can take up the matter of this report and
22 do so as expeditiously as possible.

23 MS. SWENARCHUK: Yes. If by any chance
24 I'm not able to reach the consultant about that -- but
25 that would be my plan.

1 I would like to begin by filing a number
2 of interrogatories and I have them in two separate
3 packages. One are additional interrogatories related
4 to Panel 4 evidence, and the second is a set of
5 interrogatories relating to Panel 8 evidence. I wonder
6 if these could be the next exhibits.

7 MADAM CHAIR: Yes. The interrogatories
8 referring to Panel 4 evidence will be Exhibit 1154, and
9 the interrogatories with respect to Panel 8 evidence
10 will be Exhibit 1155.

11 MS. CRONK: Could I just note for the
12 record which they are, Madam Chair?

13 MS. SWENARCHUK: The interrogatories
14 relating to Panel 4 are Forests for Tomorrow
15 interrogatories 1A, B, C, D, E; questions 2, 13, 15,
16 16, 19, 21, 24, 26, 27.

17 Exhibit 1155, the Panel 8
18 interrogatories, are from Forests for Tomorrow, No. 1,
19 2, 5, 9, 10, 11, 22; Ministry of Environment, No. 3;
20 Forests for Tomorrow 32 and 33 -- these are actually
21 duplicates, Ms. Cronk filed these as well -- 35, 36;
22 Ministry of Environment No. 10, and Ministry of
23 Environment No. 13.

24 ---EXHIBIT NO. 1154: Interrogatories referring to
25 Panel 4 evidence

---EXHIBIT NO. 1155: Interrogatories referring to Panel 8 evidence

MS. SWENARCHUK: I don't know if this microphone is going to work.

CROSS-EXAMINATION BY MS. SWENARCHUK:

Q. My first question is for Mr. Nicks, and it's a clarification question pertaining to two figures in the Panel 8 statement of evidence.

First of all, you will recall that reference has been made to Figure 5, which is at page 72 - and I'm looking now particularly at the regeneration on Crown lands graph, Mr. Nicks - and then Table 3, which is at page 124, which is a summary of fifth-year stocking assessment rules to the end of 1988.

Now, with regard to Figure 5 on page 72 and in regard to the regeneration on Crown lands, I believe the summary that was provided several times in the evidence are these figures: In 1981, the total area of regeneration was 95,000 hectares; in 1988 a 125 hectares representing a 32 per cent increase.

Now, do you have a figure for the proportion of that that was natural regeneration?

MR. NICKS: A. The proportion of which figure, Ms. Swenarchuk?

1 Q. Of each figure, the 95,000 hectare
2 figure at the beginning of the '80s and the 1988 figure
3 of 125,000 hectares.

4 A. Those are found in Figure 5?

5 Q. Right.

6 A. No, I don't believe I do have a
7 figure for that.

8 Q. Turning then to Table 3, I believe
9 Mr. Waddell clarified earlier in the day that when we
10 looked at - this is at page 124 - when we look at the
11 total at the bottom of the page for all working groups
12 of 73,729 hectares, I think Mr. Waddell clarified that
13 18,246 hectares of that was planted and that the
14 remainder was -- I want to clarify this -- I believe
15 you said either seeded or natural regeneration. Is
16 that correct, Mr. Waddell?

17 MR. WADDELL: A. I believe that's
18 correct.

19 Q. Now, do you have an indication of
20 what proportion of that was natural regeneration, if
21 not actual hectares, an approximate percentage?

22 A. Are you directing the question to me?

23 Q. To either one of you.

24 A. Well, we do have the -- I'm going to
25 let Mr. Nicks answer that because he has compiled the

1 data, Ms. Swenarchuk.

2 MR. NICKS: A. I'm not sure I'm clear on
3 exactly what your question is. Could you please repeat
4 it?

5 Q. I think I just saw the answer to my
6 question.

7 Let's look at the total -- about half-way
8 down the column for the number of hectares for all
9 working groups regenerated by natural means and we see
10 46,453.

11 All right. To clarify that further then,
12 can you indicate to me what exactly you mean by natural
13 regeneration? Are these areas which received some
14 treatment from Industry and then were left to natural
15 regeneration or no treatment at all or both?

16 A. By "some treatment", are you
17 referring to some physical activity to enhance natural
18 regeneration?

19 Q. I'll let you do it your way. Tell me
20 what you mean specifically in this chart by "natural
21 regeneration"?

22 A. Well, the natural regeneration
23 techniques are those that were reported to me by the
24 responding companies and they include such things as
25 stripcutting for black spruce and clearcutting to leave

1 advance growth, natural regeneration to aspen through
2 simply clearcutting, all forms of -- normal forms of
3 natural regeneration treatment....

4 Q. Would that include as well site
5 preparation only and then natural regeneration or would
6 that be considered to be artificial regeneration?

7 A. No. According to our definition we
8 concur, I believe, with the definition of the MNR,
9 which was that artificial regeneration involves the
10 placement of reproductive material from outside the
11 site onto the site such as planting stock and seed. So
12 it's legitimate to consider site preparation for
13 natural as a natural regeneration method. Those are
14 included.

15 Q. Now, do you have any breakdown of the
16 amount of those forty-six and a half thousand hectares
17 that used each of these natural regeneration
18 techniques?

19 A. I don't have that information with
20 me. It was used to compile the figures.

21 Q. You do have the information available
22 though, not with you but --

23 A. It's not with me.

24 Q. Can you tell me what kind of
25 breakdown is in those figures? Is it by the various

1 techniques I've asked you about?

2 A. It's more specific. It mentions
3 specific treatment by proposed working group.

4 MS. SWENARCHUK: I'm going to try to use
5 the mike now.

6 I'm asking Ms. Cronk to have that
7 material produced.

8 MS. CRONK: I understand from Mr. Nicks
9 it is available, and if it is we'll produce it.

10 MS. SWENARCHUK: The technical
11 arrangements, Madam Chair....

12 Q. Would you have any estimate in mind,
13 Mr. Nicks, with regard to the proportion of that
14 natural regeneration which was by stripcut or blockcut
15 methods?

16 MR. NICKS: A. I don't recall the exact
17 figure right now. I would have to check and get back
18 to you.

19 Q. Approximately, you don't have that
20 either?

21 A. Approximately, I don't have --

22 Q. Approximate --

23 A. I don't wish to misinform the Board.

24 Q. Fine. We'll wait.

25 Now, just to clarify, does that figure

1 then also include forest lands on which harvest
2 occurred and no subsequent treatment of any kind
3 occurred?

4 A. No, it only includes those lands on
5 which there was a prescription applied.

6 Q. And I take it there are lands that
7 have been harvested within this time period which were
8 harvested in which they received no prescription?

9 A. That's true. Those were areas that
10 were agreed to jointly by the MNR and Industry as being
11 nontreatable.

12 Q. I was going to come to this later,
13 but we can talk about this now. Is there a consistent
14 definition in all the FMAs of what constitutes
15 untreatable land or does it vary by FMA?

16 A. I'm not aware of the definitions of
17 other FMA holders for nontreatable status.

18 Q. But you are aware of the
19 definition....

20 A. Yes.

21 Q. What definition is that
22 approximately?

23 A. Approximately those areas which are
24 difficult to treat because of shallow soils and terrain
25 and residual timber.

1 Q. And do you have an idea for your own
2 FMA how the size of that area compares to the areas
3 harvested which did receive treatment?

4 A. I have a rough idea.

5 Q. And what would that comparison be?

6 A. Well, perhaps I can explain it this
7 way: Current proportion of area which receives an
8 intensive treatment, it's in the order of - that is
9 site preparation - followed by planting, reseeding, in
10 the order of 70 percent.

11 Q. Seventy per cent of the annual
12 harvest?

13 A. Approximately, yes. It varies from
14 year to year. Then there is a further proportion which
15 is left to natural regeneration and at the moment -
16 again it varies from FMA to FMA and year to year - but
17 perhaps 15 per cent.

18 Q. Fifteen per cent of the natural
19 regeneration treatment or no treatment? Which did you
20 mean?

21 A. About the same, difference is split.

22 Q. The 70 per cent intensive treatment,
23 was that a figure from your own FMA or are you
24 estimating that for all FMAs?

25 A. It's from our own FMA experience.

1 MADAM CHAIR: Excuse me, Ms. Swenarchuk.

2 Does the 70 per cent include the
3 treatment of the NSR lands?

4 MR. NICKS: Those lands have all been
5 treated, Madam Chair.

6 MS. SWENARCHUK: Let me clarify my
7 question.

8 Q. I'm asking for percentages related to
9 harvest, and I understood you to indicate that on your
10 own FMA, 70 percent of the harvested land receives an
11 intensive treatment. Is that what you said?

12 MR. NICKS: A. That is my understanding,
13 yes.

14 Q. And approximately 30 per cent then
15 receives some treatment for natural regeneration,
16 approximately 15 per cent receives some treatment for
17 natural regeneration, and another 15 per cent does not
18 receive treatment. Does that summarize it?

19 A. That has been the past practice, but
20 recently we've come up with a different system in
21 the -- speaking from April 1st onward, we've come to an
22 agreement with the MNR that we -- because we have
23 observed regeneration, natural regeneration,
24 consistently on many areas, most areas, in which we, in
25 the past, have declared nontreatable, we have reached

1 an agreement where we have two categories now,
2 intensive and extensive, and we'll be starting this
3 year.

4 That is why I haven't mentioned the
5 future. But under that system we've reached an
6 agreement where areas which are not capable of being
7 artificially regenerated or for which there is no
8 requirement from a wood supply standpoint, the 70 per
9 cent in our case corresponds to the per cent of the
10 area we feel we should site prepare -- need to site
11 prepare and treat intensively to maintain our allowable
12 cut, will fall into the extensive category and that
13 those areas will be left or assessed at the fifth year,
14 and those areas which meet the stocking standards will
15 be declared naturally regenerated.

16 Those areas which don't will be, again,
17 left for a further five years, and if successful
18 stocking has been achieved after the 10-year period,
19 then they will be considered naturally regenerated and
20 if the area that still has not been standard after 10
21 years, it is in effect nontreatable and it's agreed no
22 further efforts are required.

23 Q. Now, how do you expect this - if you
24 have an indication - how do you expect this to change
25 the proportion that we talked about earlier about, your

1 70, 15 and 15 -- how do you think those proportions of
2 land will change?

3 A. I expect the proportion of natural
4 will increase. It's been the observation of our
5 foresters that, as I said, areas of untreatable
6 characteristics -- shallow sites, sites with dense
7 residual hardwood -- do indeed come back to something.
8 Often softwood, shallow sites, the uplands sites, tend
9 to have an understory of black spruce in the way of
10 advance growth; that does provide adequate stocking,
11 even with natural regeneration.

12 So I would optimistically expect the area
13 that does not regenerate either naturally or
14 artificially after a 10-year period might be in the
15 order of five per cent. That is my best estimate at
16 the moment. This is an involving process.

17 Q. So you would be looking at 25 percent
18 natural regeneration and about five per cent
19 nontreatable?

20 A. That would be my best estimate at the
21 moment.

22 Q. Now, is that based on one FMA or the
23 four?

24 A. There are three.

25 Q. Are your figures based on the three

1 or just the one?

2 A. They are based on the upper and lower
3 Spanish forest, which are the two FMAs, most of my
4 involvement is with. But I would suggest that the same
5 relationship should hold for the pine land FMA,
6 immediately adjacent to the upper Spanish and similar
7 in many respects.

8 Q. Now, Mr. Squires, I would like you to
9 give me the same information with regard to the FMA
10 that you are concerned with and the proportion of
11 regeneration on that FMA which is intensive in
12 artificial regeneration techniques.

13 MR. SQUIRES: A. intensive and
14 artificial being synonymous?

15 Q. Is reason I want to be careful in the
16 wording here is as we've heard for two years people use
17 these terms quite differently. I don't want to put
18 words in your mouth.

19 Just looking at the chart on page 124
20 which stocks about natural and artificial approaches.
21 For your FMA then, what proportion of the area is being
22 regenerated with artificial maintenance?

23 A. I would have to give approximate
24 estimates for the Board.

25 Q. Yes.

1 A. Because it varies from year to year
2 essentially over a five-year period as well as
3 comparing one five-year period to another.

4 We have done studies checking on the
5 ability to treat the ground with artificial. It has
6 varied up and down between say 35 per cent to 45 per
7 cent on the Spruce River Forest. That is ground that
8 we can effective mechanically site prepare. The areas
9 above that are regenerated naturally in one form or
10 another.

11 Q. So 65 per cent then is one form or
12 another of natural regeneration, approximately?

13 A. 65 per cent give or take five per
14 cent.

15 Q. And what are you including in your
16 use of natural regeneration? Are you including site
17 preparation for natural regeneration or not?

18 A. I would include it as natural --
19 natural.

20 Q. And any approximation of what
21 percentage that entails?

22 A. I can tell you it would be low
23 because we have tended to augment natural --
24 scarification for natural inter-seeding.

25 Q. And what proportion of that natural

1 regeneration results from block or stripcutting?

2 A. I'm afraid to hazard a guess on what
3 proportion it would be.

4 Q. Is there any being done?

5 A. Yes, there is some. The total area
6 would be somewhere in the vicinity of 500 hectares over
7 a five-year period.

8 Q. Could you give some indication of
9 what percentage?

10 A. It's probably in the vicinity of
11 between one to two per cent.

12 Q. So would I be correct in assuming
13 then that between one and two per cent of the harvested
14 lands over that time period have been harvested using a
15 block or stripcut approach; is that right?

16 A. That is correct.

17 Q. And the remainder is conventional
18 cutting largely?

19 A. That's correct.

20 Q. And, Mr. Ferguson, with regard to
21 your FMA lands, could you indicate what proportion of
22 those lands are being -- of the harvested areas of
23 those lands are being regenerated using artificial
24 means, first of all?

25 MR. FERGUSON: A. Again, I would have to

1 suggest, as my colleagues have done, an approximation.
2 It varies year to year, et cetera. I would estimate
3 that artificial regeneration on the issue of forest
4 growth for which I am directly responsible would amount
5 to 65 to 70 per cent of our renewal treatments.

6 Q. Now, could you further define what
7 you mean by "artificial"? Do you mean site preparation
8 and planting or planting as one category, site
9 preparation as another. Which do you mean?

10 A. What I consider to be regeneration
11 treatments, artificial regeneration treatments, would
12 be planting and seeding.

13 Q. So then you would class site
14 preparation to enhance natural regeneration as a
15 natural regeneration technique, would you?

16 A. That's correct. Referred to as
17 scarification normally.

18 Q. So if 65 per cent is planting or
19 seeding, as I understand you then approximately 35 per
20 cent would be natural regeneration techniques?

21 A. That's correct.

22 Q. And of that approximately what
23 proportion involves some treatment and what are the
24 treatments?

25 A. Some of the natural regeneration

1 treatments which we have applied -- I assume you are
2 talking natural regeneration?

3 Q. Yes.

4 A. In the poplar working groups the
5 natural regeneration treatment would strictly be to
6 clearcut for natural regeneration, promote suckering.
7 No further treatment involved there.

8 We have made use in the spruce working
9 group on lowland sites, primarily use of strip cuts,
10 seed tree plots; we have done some scarification in the
11 spruce work group to improve seedbed as well. That was
12 done in the early years of the FMA, it's becoming less
13 common now. I guess the reason for that being that as
14 we move more towards full-tree logging systems, we need
15 to improve the seedbed in the lowland spruce types of
16 as no longer not so much a requirement.

17 Q. And why is that?

18 A. The presence of logging slash, in our
19 experience in the lowland spruce types, tends to
20 inhibit spruce regeneration. When we were heavily into
21 running at the stump, we found it necessary to remove
22 this, or at least align the slash that was left and
23 improve the seedbed, not only progress more the
24 full-tree systems -- necessary.

25 Q. So can you give us an approximation

1 of the amount of the harvested area on which strip and
2 blockcutting is being used?

3 A. Strip and blockcutting --

4 stripcutting is such, I would say -- is a very minimal
5 proportion. We have found that much more effective, in
6 our part of the world anyway, our seed tree plots which
7 tend to achieve the same result.

8 The nature of the spruce working group on
9 English River Forest is -- it's usually a very small,
10 irregular-shaped type of stands and very difficult in
11 some cases to incorporate strips, but by using the
12 natural boundaries of adjacent stands and seed tree
13 plots as well, we find this is a successful method of
14 regenerating spruce.

15 Q. So I take it then there's not much
16 regeneration through strip cuts. What percentage then
17 approximately would be occurring using seed blocks --
18 seed trees?

19 A. I would -- there are usually more
20 than just a single tree.

21 Q. That is why I said block.

22 A. Plot we call them.

23 Q. Plot.

24 A. Again, this technique is used
25 strictly in the lowland sites of which there are not a

1 great deal. I would say in total that the use of the
2 seed tree plots, there's a -- renewal technique would
3 be less than five per cent of the English River Forest.

4 Q. And I'm not sure if we dealt with
5 this one yet. The proportion of the harvested area on
6 which the company uses scarification, as you call it,
7 to foster natural regeneration.

8 A. As I've indicated, this was a
9 technique which was used primarily in the earlier years
10 during the early 1980s. In fact, I would say over the
11 last three to four years I don't believe we've done any
12 of this treatment.

13 Q. Just summarizing in my own mind.
14 About 65 per cent artificial regeneration using
15 planting or seeding; correct?

16 A. That's correct.

17 Q. And this is for how many FMAs now?

18 A. I'm talking specifically to the
19 English River Forest. That is the only one I can speak
20 with any authority on, I'm afraid.

21 Q. Mr. Gemmell, on your land base, the
22 same questions. What is the -- this is Spruce River?

23 MR. GEMMELL: A. Iroquois Falls Forest,
24 Iroquois Falls River.

25 Q. What is the approximate proportion of

1 the harvested land being treated by artificial means
2 and what do you include as artificial?

3 A. I would estimate it's between 60 and
4 70 per cent and it includes planting and seeding.

5 Q. Not site preparation for natural
6 regeneration?

7 A. No.

8 Q. All right. So then of the natural
9 regenerating areas then, what proportion received a
10 treatment?

11 A. As I indicated in the presentation,
12 there was a certain amount of it done pre-1985,
13 alternate blockcuts and seed tree since about 1985.
14 Our regeneration on the road sites has been in the
15 direction of careful logging leaving advance growth as
16 the source of renewal.

17 Q. And any site preparation for natural
18 regeneration?

19 A. No, we wouldn't want to because we
20 are trying to maintain the advance growth.

21 Q. I didn't ask Mr. Ferguson. Is there
22 a proportion of the lands on this FMA that receive no
23 treatment whatever after harvest?

24 MR. FERGUSON: A. Are you directing the
25 question to me?

1 Q. Yes.

2 A. The only proportion of the land which
3 we feel is not receiving a treatment is that proportion
4 which is more or less removed over the long-term in the
5 construction of roads and things of this nature which
6 might amount to in the neighbourhood of five per cent.

7 Q. So all harvested lands aside from
8 that receives treatment?

9 A. That's correct.

10 Q. And Mr. Gemmell --

11 MR. GEMMELL: A. All harvested land
12 receives a silvicultural prescription and treatment,
13 yes.

14 Q. Are there lands on which the harvest
15 is the only treatment?

16 A. Now, again, we are talking -- and I
17 refer to it as careful logging, that is a harvest
18 treatment to maintain the advance growth -- so, yes.

19 Q. Careful logging for advanced growth
20 is a technique for which funding is available under the
21 FMA; is that not correct, Mr. Gemmell?

22 A. Not in our FMA, no.

23 Q. To your knowledge, is it available on
24 any FMA lands?

25 A. I'm not -- it could be. I'm not

1 familiar with the other FMA ground rules.

2 Q. What about the other FMAs with which
3 the gentlemen are familiar? No funding in your --
4 Mr. Nicks?

5 MR. NICKS: A. No.

6 Q. What about funding under these FMAs
7 for strip or blockcuts?

8 A. No.

9 Q. No, Mr. Nicks.

10 MR. SQUIRES: A. No.

11 Q. No, Mr. Squires.

12 MR. FERGUSON: A. No.

13 MR. GEMMELL: A. No.

14 Q. No, Mr. Ferguson or Mr. Gemmell.

15 Now, Mr. Nicks, as you can see from my
16 little survey here, different companies do seem to work
17 with different definitions of what constitutes natural
18 regeneration techniques.

19 In the data that you will be providing me
20 with regard to how Table 3 was analyzed, is the
21 company's definition of what constitutes natural
22 regeneration part of the data?

23 MR. NICKS: A. No, it's not, however,
24 there is a description of the system.

25 Q. I want to turn, just for a moment,

1 Mr. Squires, to your evidence regarding stocking
2 standards and the different plots that are referred to
3 in the appendix to your containment in the Panel 8
4 evidence.

5 Specifically I just want to refer to --
6 for a moment to plots one and two.

7 MR. SQUIRES: A. Okay.

8 Q. Now, these are not field plots, is
9 that correct, in the sense of they are not plots that
10 were laid out on harvested forest lands?

11 A. These plots were laid out in the
12 plantations that were established in I believe the near
13 year 1981 in the nursery, in the agricultural field.

14 Q. So you would agree then, for example,
15 they would not be subject to a type of competition
16 problem that an operational plot on forested land
17 harvested would be subject to?

18 A. I'm not sure I can agree. I really
19 don't know as to what the competition was. I would
20 expect there would be -- where the Ministry of Natural
21 Resources....

22 Q. But you indicated you can't respond
23 but I assumed if it was planted in an agricultural
24 field the diversity of species that one encounters on
25 the very site, types within forest land, the problem is

1 not present?

2 A. Again, I'm not prepared to speculate
3 on that. I know there is quite a diversity present
4 today relative to many cases.

5 Q. Now, do you have Exhibit 1138? That
6 was a compilation of interrogatory responses filed by
7 Ms. Cronk.

8 A. 1138.

9 MS. CRONK: Just to assist, Madam Chair,
10 if you just tell the witness what interrogatory number.
11 They probably don't have it in the form, but they have
12 all the interrogatories.

13 MS. SWENARCHUK: Forest for Tomorrow
14 Interrogatory No. 17.

15 Q. In the interrogatory pertaining to
16 the treatments applied to plot three, which was one of
17 the plots you referred to in your stocking discussion
18 and it's also as you indicate in your response -- I
19 take it you wrote this response?

20 MR. SQUIRES: A. Yes, I did.

21 Q. In Block 10 of 34-C?

22 A. I'm sorry, within what block?

23 Q. Block 10.

24 A. All right.

25 Q. And I simply wanted to review with

1 you that with regard to treatments and stocking
2 standards on this plot, it's your view expressed in
3 paragraph B of this response that it would not be
4 practical to use the same intensive treatment on those
5 field plantations?

6 A. Not practical in the sense it's not
7 necessary.

8 Q. You also said it would not be
9 practical or necessary. What did you mean by
10 "practical" then?

11 A. Not practical in the sense that it
12 was extremely expensive and it would not be necessary,
13 that would be the case, implies not practical.

14 Q. Practical also refers to the cost?

15 A. (nods)

16 Q. And one general question for you,
17 Mr. Waddell, with regard to the position of the
18 Industry on its renewal capacities as expressed
19 throughout the Panel 8 witness statement.

20 I take it you are arguing for the
21 capacity of the Industry to regenerate forested lands
22 and you have in mind that the harvest technique on most
23 of those lands will be conventional large area
24 clearcutting; is that correct?

25 MR. WADDELL: A. Not necessarily.

1 Q. Could you expound then?

2 A. Well, can I ask you to rephrase your
3 question, please? I'm not certain that I understand
4 it.

5 Q. There is, I think, no discussion in
6 the Panel 8 witness statement of modified cutting,
7 meaning strip or blockcutting. There is frequent
8 reference to harvest, but seeing no references
9 specifically to strip or blockcutting I'm assuming that
10 your meaning of the word "harvest" throughout the Panel
11 is largely conventionally large area clearcutting?

12 MS. CRONK: Madam Chair, I don't object
13 to the question but I do object to that
14 characterization of what the evidence is. Part of the
15 Panel 8 evidence includes the case studies. I have no
16 objection to Ms. Swenarchuk putting that question, but
17 there is discussion that...

18 MS. SWENARCHUK: I think I confined my
19 question to the Panel 8 witness statement, Ms. Cronk.
20 I quite agree. There is one example in the Panel for
21 case studies.

22 Q. Let me just ask you then what you
23 have in mind, Mr. Waddell, when you are using the term
24 "harvest" in the Panel 8 witness statement?

25 MR. WADDELL: A. Well, inasmuch as the

1 clearcutting -- clearcutting is the preferred
2 silvicultural system across the boreal forest for
3 the -- in the great majority of cases. Yes, I would
4 agree that the silvicultural system that we have in
5 mind is that of clearcut.

6 MS. SWENARCHUK: Do you want to take a
7 break now or should I proceed with the next subject
8 area?

9 MADAM CHAIR: Yes, we'll take a short
10 break now, 10 minutes, and come back and then go until
11 12:00.

12 ---Recess at 10:53 a.m.

13 ---On resuming at 11:08 a.m.:

14 MADAM CHAIR: Please be seated.

15 MS. SWENARCHUK: Q. Mr. Ferguson, I'd
16 like to ask you some questions arising out of a Panel 4
17 case study from your company.

18 First of all, you have included in the
19 appendix to that study ground rules for the FMA?

20 MR. FERGUSON: A. That's correct.

21 Q. And if you would refer to Exhibit
22 1154, or if it's more convenient to you, the Panel 4
23 interrogatories - yes - Question 2 from Forests for
24 Tomorrow. These I filed this morning.

25 A. Yes, I have it here.

1 Q. We asked for the differences between
2 the ground rules in Appendix 1 and the silvicultural
3 prescriptions under the pre-FMA management plan. Did
4 did you write any response to this, Mr. Ferguson?

5 A. I don't believe I wrote the actual
6 response, however, it was discussed with me.

7 Q. So I'm assuming you agree with the
8 answer provided then?

9 A. If I might just have a moment to
10 refresh my memory. It's been some time.

11 Q. Certainly.

12 A. Yes, I would agree with that. I
13 would agree with the response.

14 Q. So in brief, I will just clarify the
15 record by reading it in. The response was that:

16 "The pre-FMA management plan written by
17 the company did not include silvicultural
18 prescriptions, however the grounds rules
19 as agreed to at the beginning of the FMA
20 were, for the most part, reflected with
21 forest management practices on the
22 English River Forest prior to the signing
23 of the agreement. The one major change
24 was the provision of a planting option in
25 the FMA ground rules."

1 It goes on to say:

2 "From 1974 to the 1980 signing of the
3 English River FMA, there was no planting
4 on the English River management unit."

5 Now, is it correct that the ground rules
6 for each FMA were negotiated with each company as the
7 FMA was signed?

8 A. That is my understanding certainly in
9 the case of the English River.

10 Q. And that complies with the
11 understanding of other people involved?

12 A. (nods)

13 Q. Yes.

14 Now, I would like to ask Mr. Waddell and
15 Mr. Squires and Mr. Gemmell if the difference between
16 the pre-FMA management plan and the FMA ground rules
17 which apply to this FMA, namely, the addition of a
18 planting option, is similar to the change that occurred
19 with other FMAs or were there additional changes?

20 Mr. Squires?

21 MR. SQUIRES: A. To the best of my
22 recollection on the Spruce River Forest at the
23 negotiating time back in 1980-'81, the prescription for
24 planting was current and the Ministry renewal on the
25 Spruce River Forest. I cannot think of any new

1 prescriptions that were put into the ground rules that
2 had not already taken place on the Spruce River Forest.

3 Q. So then those ground rules also were
4 reflective of forest management practices on the Spruce
5 River Forest before the FMA?

6 A. As to type of treatment, yes, maybe a
7 difference in intensity.

8 Q. And, Mr. Waddell, with regard to the
9 E.B. Eddy FMAs?

10 MR. WADDELL: A. Well, let me be
11 perfectly clear on what you are asking me, Ms.
12 Swenarchuk, because we did not carry out any
13 regeneration responsibilities, of course, prior to the
14 signing of our FMA in 1980.

15 Are you asking me on the upper and lower
16 Spanish Forest if the ground rules that we negotiated
17 with the MNR in 1980 were --

18 Q. I'll rephrase the question.

19 A. Thank you.

20 Q. With regard to the ground rules
21 negotiated with the Ministry when the FMAs came into
22 effect, are those ground rules largely reflective of
23 forest management practices that occurred on those
24 lands before the FMAs were negotiated?

25 A. By and large I would agree that they

1 were with the exception of the wind rowing of poplar
2 that we illustrated in our case study. This was not
3 the practice carried out by MNR prior to our
4 introducing it in 1981.

5 Q. And what about the planting option
6 provided in your ground rules? Have there been
7 planting on those lands before the FMAs in the decade
8 before, for example?

9 A. When you say "those lands" you mean
10 our FMA lands?

11 Q. Yes.

12 A. Yes, very definitely, the Ministry
13 had a vigorous planting program prior to 1980 on our
14 FMA lands.

15 Q. Mr. Gemmell? And my question is:
16 Were the ground rules negotiated in your FMA largely
17 reflective of forest management practices that occurred
18 on those lands before the FMAs were developed?

19 MR. GEMMELL: A. Yes, I would say they
20 are largely reflective of it. There wasn't the same
21 intensity being carried on, specifically planting
22 program. There wasn't as much planting going on. So
23 to a degree, yes, they were reflective.

24 Q. And would it be accurate to say --
25 I'll ask Mr. Waddell, you having led much of this

1 - evidence -- that speaking now generally across the area
2 of the undertaking, that a result of the FMA structure
3 has been an increase in planting treatments across the
4 area of the undertaking?

5 MR. WADDELL: A. I have no -- I can't
6 put my head to any figures at the moment where I can
7 answer that question.

8 Q. From your experience, that has not
9 been your impression?

10 A. I would think so.

11 Q. Now, Mr. Ferguson, with regard to the
12 case study from your area, would you please turn to
13 page 33 of that study, which is the Panel 4 witness
14 statement.

15 MR. FERGUSON: A. Yes, I have it.

16 Q. Now, on these pages, pages 32 and
17 33, were you the writer of these pages, Mr. Ferguson?

18 A. Yes, I was.

19 Q. You were discussing, then,
20 alternatives for renewal options on this land, and at
21 the top of page 33 you are discussing the option of
22 site preparation for natural seeding, and you indicate
23 in the previous page that it was worthy of serious
24 consideration.

25 However, you indicate in the last line of

1 that paragraph that the forester was not convinced that
2 natural seeding would be generated to site to its full
3 potential and therefore that option was not utilized?

4 A. Yes, that's correct.

5 Q. Could you indicate for us if your
6 company were paying the full cost of the regeneration
7 treatment, would your decision have been different?

8 A. No, it would have been the same
9 decision.

10 Q. And would you generalize that
11 further? Are you suggesting that your use of planting
12 would be as widespread if the company were paying the
13 full cost as it is with the regeneration under the FMA?

14 A. I think you lost me there. We jumped
15 from a seeding treatment to planting and I'm not sure I
16 got quite the connection.

17 Q. Perhaps I'll rephrase the question.
18 The forester in this case decided not use natural
19 seeding as the option?

20 A. Right.

21 Q. And can you remind us what option was
22 utilized?

23 A. The option that was utilized was site
24 preparation with simultaneous seeding of jack pine.

25 Q. As opposed to natural seeding only?

1 A. Correct, yes. The ground rules would
2 state that site preparation, whether it be a site
3 preparation followed by seeding or planting or strictly
4 a site preparation with no follow-up treatment or in
5 effect a scarification, those were the three options.

6 In my evaluation of the site based on
7 observations of other very similar sites in the general
8 area which had been treated strictly by scarification
9 for natural, the regeneration was not up to what I
10 considered to be the optimum level of the site, and for
11 that reason the choice was made to augment the natural
12 seeding, recognizing that some would be present, but
13 the application of seeds directly onto the site would
14 be expected to bring the site closer to its full
15 potential.

16 Q. And when you say closer to the full
17 potential, do you have in mind an approximate
18 difference in stocking resulting from the seeding
19 treatment?

20 A. Thinking back to the time when this
21 was done, and we are looking back eight years, I
22 believe the figures that were tossed around in my mind
23 were that we could probably, over time, achieve the
24 minimum stocking level of 40 per cent with no further
25 seeding being applied.

1 However, I felt that by seeding of the
2 site as well that we could achieve stocking levels in
3 the neighbourhood of 60 to 70 per cent given that the
4 site preparation cost was to be incurred. In either
5 case my decision was to seed as well considering that
6 the price of seed is relatively small compared to the
7 total minimal cost of the site.

8 Q. And the cost of the seed was a cost
9 borne by the Ministry; is that not correct?

10 A. Yes, that's correct.

11 Q. So are you saying that even if you
12 had left it for natural regeneration you would have
13 performed the site preparation on it?

14 A. That's correct, and according to the
15 ground rules there was no option but to conduct some
16 form of site preparation.

17 Q. Now, would you look at Exhibit 1154,
18 which are the Panel 4 interrogatories we filed this
19 morning, and the first page of that exhibit, which is
20 Question 1A, in which we asked for each of the case
21 study areas: What is the cost per hectare of the
22 silvicultural treatments used.

23 And with regard to Case Study 4A, we see
24 that the overall cost per hectare of the silvicultural
25 .. treatments used in Case Study 4A was \$108.38 per

1 hectare in terms of MNR funding provided to Canadian
2 Pacific Forest Products Limited under the terms of the
3 FMA. This figure is in 1982 dollars and excludes the
4 cost of seed which was provided at no cost by the MNR
5 as per the terms of the FMA.

6 So if I understand your response, you
7 were obligated under the ground rules to use site
8 preparation; correct?

9 A. That's correct.

10 Q. And the seed was to be provided by
11 the MNR so there was no additional cost to the company
12 that included seeding with the site preparation?

13 A. The additional cost to the company
14 was minimal. There would be some associated costs to
15 the company in that the seeding with the -- or
16 simultaneous seeding does involve some time spent
17 handling seed.

18 It is necessary to limit the travel speed
19 of the Bracke scarifier when seeding to in fact get the
20 seed placed properly. So there were some additional
21 costs to the company, but not of a major nature, no.

22 Q. Now looking at Paragraph C on that
23 page, you discussed the option of site preparation
24 followed by jack pine planting?

25 A. I'm sorry, we are back to --

1 Q. Page 33 of the witness statement,
2 Case Study A, third paragraph, C?

3 A. Yes.

4 Q. And the decision was not to use
5 planting?

6 A. That's correct.

7 Q. On the ninth line of that paragraph,
8 it says that another consideration was in 1982, limited
9 quantities of planting stock were available.

10 Now, in your experience, are there lands
11 within the area of the undertaking which would have
12 been planted at various times in the '80s if more
13 planting stock had been available?

14 MS. CRONK: On his area?

15 MS. SWENARCHUK: In his experience. I'll
16 let him define how he wants to answer that.

17 MR. FERGUSON: I would have to confine my
18 comments to the area with which I am familiar, and I
19 would have to say no, that we prescribe the treatments,
20 whether they be planting or seeding, based on the site
21 characteristics and that with the exception possibly of
22 the first year of the FMA, we certainly have planted
23 areas which we wanted to plant and seeded areas which
24 we wanted to seed.

25 The first year or so of the FMA, your

1 point may be valid in that -- as pointed out in one of
2 the interrogatories, there was no planting as such done
3 on the English River Forest for a period of time prior
4 to the FMA.

5 It was our feeling that this did
6 contribute to some extent to the NSR which was present
7 on the English River Forest when the FMA was signed,
8 and, in fact, the planting we did in the initial years
9 of the FMA was directed towards the NSR. However, it
10 required a coupe of years to phase in the English River
11 Forest into the overall nursery stock production in the
12 northwest region.

13 So I would say that in the first year or
14 two of the FMA program in the English River Forest
15 there may have been a shortage of stock. We would have
16 liked to have dealt with some of the NSR areas more
17 quickly than what we did.

18 MS. SWENARCHUK: Q. Mr. Gemmell, on the
19 areas which you are familiar, has that ever been the
20 case, that there have been lands which the company
21 would have planted had more stock been available?

22 MR. GEMMELL: A. I think over the years
23 of the -- since the inception of the FMA, we identified
24 the NSR lands which were planted as per the
25 prescriptions. I think we are fairly close to balance

1 as to what we want to plant were planted. There is
2 very close within, say, half a million trees at least.

3 Q. Half a million trees would translate
4 to - if this can be done - what type of area?

5 A. Two thousand trees to the hectare.

6 Q. So we are talking about several
7 thousand hectares where there may not have been the
8 stock you wanted?

9 A. These are just -- and the only
10 concern is what is left the NSR areas or backlog areas,
11 but very close to what we wanted is what we are doing.

12 Q. And was that the case right through
13 the '80s?

14 A. Well, there was the inception of the
15 FMA and then there was the implementation period, so
16 eventually the NSR areas were identified and the areas
17 have been treated over those years.

18 Q. So you haven't had any problem with
19 stock availability?

20 A. No, we haven't.

21 Q. Can I ask you, Mr. Squires, on your
22 lands have there been areas that would have been
23 planted if more stock were available than there was?

24 MR. SQUIRES: A. I would have to say
25 that between 1985 and today there is area that would

1 have been planted that had not been planted because
2 stock had not been available.

3 Q. Thank you. And Mr. Waddell or
4 Mr. Nicks?

5 MR. WADDELL: A. To the best of my
6 knowledge on our FMAs we have not had any stock
7 shortage since the inception of the FMAs.

8 MR. GEMMELL: A. Ms. Swenarchuk, I just
9 want to make sure our maths agree. Yours is as bad as
10 mine. I think it works out to a coupe hundred hectares
11 a year that I was talking about, that is how close we
12 were.

13 Q. Now, Mr. Ferguson, if we could look
14 at pages 42 to 43 of your case study, and this has to
15 do with a stocking assessment on the areas, and
16 specifically on page 42 and the chart in the middle of
17 the page we notice that 27 per cent of the jack pine
18 found was off the patches from site preparation?

19 MR. FERGUSON: A. Yes, that's correct.

20 Q. And five per cent was on the patches?

21 A. That is also correct.

22 Q. And that you indicated on page 43,
23 the following page in paragraph B, with regard to the
24 jack pine off the patches - and I'm reading now the
25 fourth line from the bottom of that paragraph - that

1 this level of natural regeneration is expected on sites
2 of this type.

3 Now, my question then is: Was
4 scarification really necessary here? Could you not
5 have received this level of regeneration without the
6 scarification?

7 A. Well, in effect, I suspect that most
8 of this 27 per cent may well have been there and it is
9 a good probability that it was not directly
10 attributable to the scarification as such. However,
11 the 27 per cent stocking does not meet the minimum
12 requirements under the FMA.

13 This is very consistent with what I had
14 expected. Over time it might increase somewhat, but
15 still would be very, very close to the minimum, at
16 best.

17 Q. This was the second year stocking
18 assessment and I think witnesses have testified during
19 this Panel that one can expect stocking on natural
20 regeneration lands often to improve over time.

21 Are you saying that you don't think it
22 would have improved to the minimum stocking level?

23 A. I'm saying that it may have improved
24 to the minimum stocking level, but I doubt it would
25 have gone much beyond that.

1 Q. Now, on page 47 of this case study on
2 the second full paragraph you discuss your company's
3 tree improvement programs for jack pine and black
4 spruce at both its Thunder Bay and Dryer operations.
5 And we asked for an interrogatory on this issue and
6 it's Forests for Tomorrow Question No. 13 contained in
7 Exhibit 1154?

8 A. Sorry, what was the number of that
9 again?

10 Q. Forests for Tomorrow No. 13.

11 We asked how many hectares the company
12 has planted or seeded with genetically improved trees.
13 Are you the author of this, Mr. Ferguson?

14 A. No, I'm not. I'm not directly
15 involved in the tree improvement program.

16 Q. That's fine. Perhaps you would like
17 to read over the responses.

18 A. Yes. Thank you. Yes, I've read it.

19 Q. And you've read his response?

20 A. To the best of my knowledge, this is
21 correct, yes.

22 Q. Can you indicate what rotation the
23 company expects to use with the genetically improved
24 stock?

25 A. That would be purely speculative. I

1 don't believe that enough -- certainly, I'm not
2 familiar with the data to the extent where I would be
3 comfortable in predicting a rotation age.

4 We would hope to possibly reduce rotation
5 age to some extent, however, there are other gains, as
6 I understand it, to be gained from tree improvement
7 over and above the rotation age. They may be in the
8 form of tree form and particular growth characteristics
9 of the tree.

10 It is my understanding, and I must stress
11 that I am by no means anything close to an expert on
12 tree improvement, but possibly we could expect to gain
13 increases in the vicinity of possibly ten per cent
14 growth and I would -- translating that into reduction
15 of rotation age, being a rotation age now of jack pine
16 and natural standards, is seven years. Possibly we
17 could decrease that to the order of 65 to -- 60 to 65
18 possibly and have the same size of trees, if that is of
19 any assistance. I stress that I am by no means an
20 expert in this field.

21 Q. Now, with regard to the practice of
22 clearcutting, Mr. Ferguson, would you agree that the
23 size of the clearcut does have an impact on the amount
24 of natural seed that can be expected to reach a site
25 particularly with full-tree logging?

1 A. To be clear in my mind, could you
2 repeat that, please?

3 Q. Would you agree that the size of
4 clearcut can have an impact on the amount of natural
5 seed that can be expected to reach a site particularly
6 with full-tree logging when the slash is removed from
7 the site?

8 A. That would depend in large part to
9 the species in which you are discussing. Full-tree
10 logging in the case of jack pine would probably remove
11 most of the tops and branches and in that sense would
12 remove most of the seed from the site as well.

13 In the case of spruce, for instance,
14 again, we see that as present directly in the slash
15 would be removed, however, seed from standing seed
16 sources, in my experience, can travel great distances
17 and I'm not sure it would have a major effect there as
18 well.

19 Q. Even with the spruce, though, I think
20 you are indicating that the actual amount of seed that
21 would be available on the site would be decreased?

22 A. In that the seed and the slash would
23 be removed, yes. However, in my experience, that does
24 not contribute significantly to the regeneration of the
25 forest.

1 Q. That does not contribute
2 significantly, is that what you --

3 A. That's correct.

4 Q. Are you using planting extensively on
5 your black spruce sites?

6 A. No, we are using -- in the lowland
7 sites where the pure black spruce tends to occur, the
8 method by which we renew the black spruce forest is
9 through the leaving of largely the seed tree plots.

10 Q. Mr. Nicks, I would like to turn to
11 Case Study B, the Eddy one. Now, this is a small study
12 area, is it not, 27.9 hectares?

13 MR. NICKS: A. Certain blocks are quite
14 small, however in the interests of maintaining the
15 uniform site, it's desirable to concentrate the
16 experiment on a relatively small area.

17 Q. And this was an experimental
18 situation as opposed to a routine operational
19 situation; is that not correct?

20 A. That's correct, yes.

21 Q. For example, I think you indicated
22 yesterday that 11 assessments were done of results on
23 this area and that that related to the experimental
24 nature of the area?

25 A. Eleven survival assessments, right.

1 Q. Now, again, on the first question,
2 our Panel 4 Interrogatory No. 1 in Exhibit 1154, we
3 asked the cost of the silvicultural treatment on this
4 area and you've indicated it was \$412.68 per hectare
5 and that in terms of MNR funding, which again excludes
6 the cost of nursery stock and herbicide?

7 A. Correct.

8 Q. Now, is this a representative cost of
9 your artificial treatment methods on the E.B. Eddy
10 areas or is this unusually high?

11 A. Are you referring to the MNR funding
12 provided?

13 Q. I'm referring to the cost of the
14 silvicultural treatments, the \$412.68.

15 MS. CRONK: Sorry, Madam Chair, the
16 answer indicates that that is the funding level for
17 the MNR.

18 MS. SWENARCHUK: Q. Is this
19 representative of costs to MNR of silvicultural
20 treatments on E.B. Eddy stands?

21 MR. NICKS: A. No, it's not. You've
22 heard in our evidence yesterday the amount of heavy
23 site preparation is in the order of 20 to 25 per cent
24 at the moment so it's not representative of the
25 majority of our area. In other words, we have

1 different rates for different intensity of site
2 preparation.

3 Q. Now, on page 38 of the study, you've
4 indicated in the third paragraph,

5 "With aerial herbicide released as
6 required, stock jack pine stand of one
7 thousand trees per hectare on this area
8 should be achievable rotation.'

9 Now, I suggest that you are expecting to
10 require additional herbicide release sprays; is that
11 correct?

12 A. Not in this particular area. I
13 believe it's free to grow.

14 Q. And does that mean in your mind that
15 you will not be spraying with herbicides at anytime in
16 the future?

17 A. Not necessarily. There is a
18 possibility even in a free-to-grow condition of aspen
19 continuing to grow and presenting a problem, and we've
20 been discussing with the MNR the possibility of
21 considering some of that work. I haven't been party to
22 the discussion and I don't feel qualified to answer to
23 the extent of those discussions.

24 Q. But you agree with me that it is
25 possible that you could contemplate herbicide sprays

1 even after the point at which the particular stand is
2 free to grow?

3 A. I would say that would be a very rare
4 instance, but it is one we are cognizant of.

5 Q. Now, on page 41 you refer to -- on
6 the first paragraph to elevating the maximum allowable
7 depletion of the jack pine working group, and I would
8 like you to refer now to Exhibit 68 which is the
9 five-year review of the FMAs. Exhibit 68.

10 Do you have page 65?

11 A. We are getting it.

12 Q. Now, I'm looking at the chart at the
13 bottom of the page which compares the maximum allowable
14 depletion and the forecasted harvest with the actual
15 harvest on those FMAs and we note in both cases that
16 there is a considerable gap certainly between the MAD
17 and even between the forecasted harvest and the actual
18 harvest.

19 And in view of that gap my question is:
20 Why have you indicated in the second paragraph on page
21 41, a company such as Eddy which faces major declines
22 in MAD once the current surface of over-mature timber
23 is harvested requires the intensive management
24 treatments described in the study?

25 I'm suggesting at the rate of comparison

1 here that - indicated in this chart - that E.B. Eddy
2 does not face an immediate wood supply problem?

3 A. And you are correct in that
4 assumption. Our wood supply problem is not immediate.
5 We were anticipating shortfalls in the future 30 to 40
6 years down the line and so we are simply planning --
7 attempting to plan for the forecast allowable
8 depletion.

9 The other point I would like to make, and
10 Mr. Waddell with his experience at this time on the
11 FMA, may be better qualified to answer, but I'll give
12 you my recollection at the time. As I think the Board
13 will recall there a significant downturn in the economy
14 in the early '80s. Most mills were operating at much
15 less than full capacity. Our mills were no exception.

16 Mr. Waddell could probably provide a
17 figure in terms of what our harvest was relative to
18 what it is now. It was considerably less, so the past
19 in no way represents the future in terms of harvesting.

20 MR. WADDELL: A. If I might add to that,
21 Ms. Swenarchuk, the Table 2 that you are looking at
22 indicates maximum allowable depletion and that is for
23 all working groups.

24 What we are talking about here in our
25 case study is for the jack pine working group

1 exclusively and the jack pine working group component
2 of the maximum allowable depletion is only a fraction
3 of that. I haven't got the figures at my fingertips
4 but I would say no more than 15 or 20 per cent of that.
5 For example, in the upper Spanish, it shows a maximum
6 allowable depletion of 58,176 hectares. That is all
7 working groups.

8 The jack pine component of that may be
9 15,000 hectares. So that you should compare our actual
10 harvest, which was primarily in the jack pine working
11 group, to that permissible allowable depletion of the
12 jack pine working group only.

13 The second point I would like to make is
14 that further what Mr. Nicks said, yes, we were going
15 through some pretty rough times economically in the
16 Industry in '82, '83, at the same time our Espanola
17 pulp mill what in the process of going through a very
18 large modernization program and we had anticipated it
19 would be onstream sooner than it was.

20 That is one of the reasons that our
21 forecasted harvest was greater than what the actual
22 harvest was. At the same time our large sawmill at the
23 Nairn Centre was in the same situation so that neither
24 of our mills were able to take the wood during that
25 period that we had anticipated when we wrote the

1 management plan in 1980, whenever it was.

2 The third point I would like to add here
3 is that since 1985 and in this current -- in the period
4 from '85 to '90, we have finally achieved our -- or
5 very close to our harvesting levels with our mills now
6 on production and our review that will be undertaken
7 this June will show a lot different figures in terms of
8 the actual harvest to the allowable harvest, and I give
9 that to you by way of indicating to you why we have to,
10 or feel we have to, treat our working groups as we did
11 in the case study in the intensive fashion that we did.

12 We must have that maximized wood supply
13 for the future because we are now getting up very close
14 to our maximum allowable depletion. And as Mr. Nicks
15 said, what we are doing now affects our wood supply 50,
16 60 years from now.

17 Q. Well, if we could look at the next
18 two pages of this report. On page 66 the reviewers
19 indicated in the first line of the third paragraph,

20 "For the most part the company is
21 following a clearcut implant
22 silvicultural system."

23 A. Excuse me, where is that?

24 Q. That is the first sentence to third
25 paragraph.

1 A. Yes, thank you.

2 Q. Then on page 67 in the third
3 paragraph, again, they indicate that:

4 "Aerial seeding is down from that
5 forecast, that it has been replaced with
6 planting. Seeding has been successful in
7 this area but it is not a reliable
8 technique. Should this or any other
9 regeneration method fail, the company was
10 obliged to retreat the area at its
11 expense.

12 "Since seeding is a much less costly
13 approach than planting, the committee
14 commends the company and the Ministry on
15 agreeing to share the cost of retreatment
16 in the upcoming operating period."

17 So retreated areas following seeding were
18 not required to be a company expense; is that correct?

19 A. In the first five years of our FMA,
20 that's correct.

21 I'm sorry. I think I gave you a wrong
22 answer there, Ms. Swenarchuk. Could you please
23 rephrase that question?

24 Q. I understand from that statement that
25 in the period reviewed, a retreatment due to treatment

1 failure would be done on the basis of the cost -- the
2 cost shared between the Ministry and the company and
3 not simply at the company expense?

4 A. No. I'm glad I got back to you. I
5 gave you a completely erroneous answer.

6 In the 1980 to '85 period had an area
7 been aerial seeded and it failed the company would have
8 had to bare 100 per cent of the costs of retreatment.

9 It was only in negotiating the ground
10 rules in 1985 that would cover the period from 1985 to
11 1990 that the Ministry and the company entered into the
12 clause that is now called the lessor cost treatment,
13 and that is a clause whereby should a company carry out
14 a lessor cost treatment such as aerial seeding on some
15 areas, and if that area failed, then the Ministry would
16 fund the company under the normal FMA rates for the
17 difference in cost between what the normal cost would
18 be and what had already been spent on the initial
19 earlier cost treatment, if you understand what I'm
20 saying.

21 Q. So that was for the period '85 to
22 '90?

23 A. Correct, and the first five years
24 that was not in place, so any failure by the company on
25 aerial seeding, the retreatment would have been

1 entirely at company cost.

2 Q. And we are now in 1990, and I assume
3 that you are engaged in negotiations for the next five
4 years and perhaps they have been completed.

5 Could you indicate what the practice will
6 be with respect to this question for the next five
7 years?

8 A. Could you define what you mean by the
9 question, please?

10 Q. Practice. Will cost sharing, as you
11 have described it, continue for the next five years?

12 A. Well, I didn't define this as cost
13 sharing. If the question is do we have the lesser cost
14 treatment clause in our new FMAs, I believe we do.

15 We are just in the process, as you
16 mentioned, in negotiating, and now it's only a draft
17 copy. We don't have a final version of it as yet, but
18 I will check on that. But I do believe that it is in
19 there but I can't guarantee it a hundred per cent.

20 MADAM CHAIR: Mr. Waddell, does the
21 lesser cost treatment clause come into effect if your
22 preferred treatment is more expensive and the MNR asks
23 you to use a lower cost treatment or wherever you use a
24 lower cost treatment, does it apply?

25 MR. WADDELL: I haven't personally

1 encountered your first situation where the Ministry has
2 asked us to use a lower cost treatment and it has
3 failed.

4 My understanding of where it would kick
5 in is, for example, on a site that the ground rule
6 prescriptions allows us to plant. Seeding may be an
7 option, but the preferred -- one of the options, if not
8 the preferred option, would be to plant.

9 If we feel that we have a reasonable
10 chance of getting regeneration success through the
11 lower cost treatment, in this case seeding, if we go
12 ahead and do that and it fails and two or three or four
13 years later we have to retreat, then the Ministry will
14 fund us the difference between the cost of the
15 retreatment and what they had already expended in the
16 first treatment.

17 And if I can give you a simple example.
18 Suppose the Ministry's rate of reimbursement for the
19 first treatment is \$15 a hectare and that is what we
20 receive for aerial seeding. If that fails and we have
21 to plant it and suppose the Ministry then funds us the
22 normal cost of - let me rephrase - if the normal cost
23 that the Ministry would pay us for planting -- it's
24 based on a thousand but let me translate it for a
25 hectare, please.

1 If the normal cost was \$200 a hectare -
2 and these are just examples, they are not correct
3 figures - then they would fund us the difference
4 between the \$200 and the \$15. In other words, they
5 would pay us \$185 a hectare to plant.

6 So that their cost, their total cost, is
7 15 plus 185 which equals the 200 which is what they
8 would have paid us in the initial case had we decided
9 to carry out the more expensive treatment.

10 MADAM CHAIR: And so, in effect, when it
11 comes to -- let me see if I understand this. When it
12 comes to planting and planting fails, for whatever
13 reason, you are obliged to pay the cost yourself?

14 MR. WADDELL: That's correct.

15 MADAM CHAIR: But whenever you seed
16 instead of plant, the lessor cost treatment clause
17 might come into effect?

18 MR. WADDELL: Depending upon the way your
19 ground rules are written, and the clause is slightly
20 different in some ground rules, in some ground rules,
21 it says on a site where you would normally plant if you
22 elect to do a lessor cost treatment. Then it would
23 kick in.

24 MADAM CHAIR: And the reason for this,
25 presumably, is that this MNR wishes to -- not save

1 money but somehow control the amount of money that is
2 spent on silvicultural treatment?

3 MR. WADDELL: Yes, it is, and as a matter
4 of fact our company was one that took great pains to
5 try to negotiate this with the Ministry for this very
6 reason that we felt that a company should not be
7 penalized if we went ahead and tried to carry out a
8 lower cost treatment initially and it failed.

9 In the first five years, anytime that
10 situation occurred the FMA holder was penalized because
11 normally if you do a seeding and then three or four
12 years -- it takes three or four years to assess whether
13 it is successful or not, and if you judge it's a
14 failure by then you may have to go back and re-site
15 prepare and normally plant. So you are into some very
16 big costs. And during the first five-year period,
17 prior to that lessor cost treatment clause being
18 introduced, that retreatment cost would entirely be the
19 company's.

20 So because of that, we wanted to try to
21 get into more low cost treatment as well and the
22 Industry and the Ministry developed this lessor cost
23 treatment to encourage the Industry wherever possible
24 to get into lower cost regeneration treatments.

25 MADAM CHAIR: Does it apply primarily to

1 the planting/seeding option?

2 MR. WADDELL: Primarily, but it could be
3 used in - it could be used in - and I personally am not
4 familiar with this, but I understand, for example, in
5 some form of group seed tree areas where you are -- you
6 normally would plant the area but you decide to leave
7 trees there to cast seed on the area, that is a lower
8 cost regeneration treatment. It can be risky, but it
9 is a lower cost, and in that situation my understanding
10 would be that if it fails this clause would kick
11 in.

12 MADAM CHAIR: Thank you.

13 MR. WADDELL: I now have the information
14 in front me, Ms. Swenarchuk, and in our draft ground
15 rules for the next five years, the lessor cost regen
16 treatment is in there, and if I may read the -- and I
17 stress these are draft yet, the Ministry has not
18 approved them at the head office level.

19 "Where a lessor cost regen treatment
20 fails on a site that would normally
21 receive a more expensive regeneration
22 treatment, the minister, subject to the
23 review in the annual work schedule, will
24 pay the difference between the lessor and
25 greater rates as outlined in Schedule D."

1 MS. SWENARCHUK: Q. And to your
2 knowledge, or perhaps other members can answer, is this
3 provision something similar -- common in the FMAs, in
4 the agreements?

5 Mr. Squires?

6 MR. SQUIRES: A. It's in the Spruce
7 River Forest ground rules. In fact, generally, Mr.
8 Waddell and I often argue and I would like to claim
9 that we also pushed for that clause.

10 Q. Mr. Ferguson, in yours as well?

11 MR. FERGUSON: A. Yes. Our situation is
12 very similar to the situation that Mr. Waddell has
13 outlined in that the clause was not present in the
14 original FMA, the '80 to '85 FMA, but was added in the
15 '85 to '90 and again we are in the same position of
16 currently renegotiating the '90 to '95 period and is
17 included in the draft FMA for that period as well.

18 Q. Mr. Gemmell?

19 MR. GEMMELL: A. Yes, it is.

20 MR. FREIDIN: What was Mr. Gemmell's
21 answer?

22 MR. GEMMELL: Yes.

23 MS. SWENARCHUK: Do you wish to rise now,
24 Madam Chair?

25 MADAM CHAIR: Is this convenient for you,

1 Ms. Swenarchuk?

2 MS. SWENARCHUK: Perhaps just one last
3 question.

4 Q. Mr. Waddell, I'm going to come back
5 later to the Industry's concerns about funding levels
6 for silviculture. But given this kind of provision in
7 your agreements, do you anticipate that your company,
8 for example, will attempt to use lessor cost treatments
9 more frequently given the funding levels available? It
10 seems to me it is a kind of insurance for you if you
11 did .

12 MR. WADDELL: A. On the upper and lower
13 Spanish Forest our regeneration efforts are primarily
14 aimed at jack pine, so we don't have that many options.
15 We either plant or we seed.

16 So those are about the only options we
17 have for regeneration of jack pine, and already in the
18 '85 to '90 period we are artificially regenerating a
19 higher percentage of the area by aerial seeding than
20 what we did in the first five years.

21 I think, though, by 1990, we have
22 probably reached about as high a percentage as we can
23 go in terms of the sites that we can aerial seed
24 because as we've tried to point out to the Board on the
25 rich uplands sites where competition is a real problem,

1 aerial seeding is very risky because of the competition
2 from the hardwoods.

3 And I can't speak for any other company,
4 but I do feel that this clause has been very effective
5 in helping to develop a better awareness of low cost
6 regeneration treatments. And I also should say, too,
7 there is another element here, and that is the learning
8 curve that we were all on in starting 1980 and so
9 forth.

10 It takes a while to get some confidence
11 into prescribing the silvicultural treatment that you
12 you are going to for any site and there is a certain
13 reluctance to go to a more risky silvicultural
14 technique.

15 Now that we've got a few years under our
16 belt, we are better able to look at a site and have
17 confidence as to where the lower cost treatment has a
18 reasonable chance of success.

19 Q. Does any other member of the Panel
20 wish to comment on this question, the question being:
21 Given Industry concerns about silvicultural funding
22 levels and given the lessor cost provision in the FMAs,
23 do you anticipate using more widely the less intensive
24 methods? Mr. Squires?

25 MR. SQUIRES: A. I'm not sure I can say

1 I anticipate it in the sense of being able to specify
2 an area that we will be working on. However, I can
3 state that we are quite actively talking with our field
4 supervisors and seeking out opportunities to utilize
5 this clause more effectively than we have in the past.

6 Q. Mr. Ferguson?

7 MR. FERGUSON: A. I believe it is our
8 practice to try to do things in the most economical way
9 possible.

10 If I can refer back to our activities on
11 the English River Forest, for instance, I indicated
12 earlier that approximately 65 to 70 per cent of the
13 fire renewal activities were artificial. Of that 65
14 per cent planting normally would account for 15 to 20
15 per cent of the remainder of that being the lessor cost
16 treatment of seeding.

17 Q. And you don't foresee any changes in
18 those proportions?

19 A. Not in the foreseeable future, no.

20 Q. Mr. Gemmell?

21 MR. GEMMELL: A. I don't see a big
22 change because the sites are quite different. The
23 sites, as I've illustrated before, the uplands clay
24 sites, are not conducive to the lower method of
25 regeneration because of the competition problems.

1 There is an area in the middle there
2 where there is little saw off coming down slope or
3 coming up slope, low slope definitely, lower cost regen
4 methods. And again as we are on the learning curve
5 there could be that opportunity. Where we can apply
6 the low cost treatment, we certainly will, and that is
7 again back to the advanced growth advantage.

8 MS. SWENARCHUK: Thank you.

9 Madam Chair?

10 MADAM CHAIR: All right. Why don't we
11 take our break for lunch now.

12 MR. FREIDIN: Just one matter, Madam
13 Chair. I was advised by Ms. Devaul that the Anglers &
14 Hunters indicate that their cross-examination, if it
15 starts tomorrow at 8:30, I guess it would be eight
16 o'clock, we could tell them --

17 ----Discussion off the record.

18 MR. FREIDIN: They would be through at
19 lunch, and Ms. Devaul asked whether I would be ready to
20 go after lunch.

21 I can advise the Board that I will. I
22 should advise, however, counsel for MOE, that my
23 estimates are sometimes lengthy, just to cover myself,
24 and perhaps she should consider being ready to go in
25 the middle of tomorrow afternoon because I may be

1 finished in a couple of hours as opposed to the four
2 hours I suggested I would be.

3 MS. SWENARCHUK: I can indicate, Madam
4 Chair, I'm proceeding much more slowly than I
5 anticipated. I still hope to finish today, but I'm not
6 sure.

7 MADAM CHAIR: Ms. Seaborn, you'll be
8 prepared for tomorrow, if needed?

9 MS. SEABORN: I'm always ready to follow
10 Mr. Freidin.

11 MS. CRONK: Madam Chair, could I just
12 raise a point for the consideration of the Board and
13 perhaps the comment of other parties. And it's really
14 not raised in a complaint sense at all, but in the
15 sense on behalf of the OFIA/OLMA counsel of trying to
16 assist with the process.

17 We've had some discussions among
18 ourselves as counsel about the scoping sessions of late
19 and how they have been, from our perspective,
20 proceeding in the way that assists in the timing and
21 the planning of witnesses' attendances.

22 I recognize, of course, that the MNR has
23 had to deal with this for far longer than we in terms
24 of making witnesses available, but now that the
25 hearings have moved to Toronto, of course, there is the

1 aspect of bringing witnesses, from our client's point
2 of view, from northern Ontario to Toronto and trying to
3 schedule a panel of seven and eight people at once.

4 But the point on which I rise is simply
5 this: That while the intent, as we understood it, was
6 originally the scoping sessions would provide all
7 parties, and particularly that party that was then
8 leading its evidence, with some indication as to the
9 length of time anticipated -- obviously no one can be
10 definitive about this, that cross-examinations were
11 going to take which helps with respect to timing -- but
12 particulars as well of areas on which cross-examination
13 was going take place to clarify the issues. It allows
14 us to ensure that the witnesses have the right paper
15 with them, that they have read it in advance, and that
16 we have some idea of the length of time it's going to
17 take.

18 I'm always grateful when any counsel at
19 the hearing indicates they are going to be less time
20 rather than longer than they thought, but the OFAH in
21 this case provides a good example.

22 We have no estimate at all for a very
23 long time, despite correspondence from us, as to how
24 long they were likely to be in cross-examination. I
25 had a very really practical problem as it happens in

1 this case because of the Professor McCormick's illness
2 that we had the deal with in terms of scheduling.

3 Then the word when we received it was it
4 was going to be a day, now, it's half a day. That is
5 fine. We are grateful for that. I still have no idea
6 whether the paper the witnesses were to -- we have no
7 particulars at all because they failed to attend the
8 scoping section as to what areas they intended to
9 explore, whether there is exhibits they wished me to
10 review.

11 I understand that there is some
12 obligations to communicate among counsel, but I just
13 raise the matter now because all we can do is what the
14 MNR did and plan the best we can, but it seems to me
15 that some of the purpose that the Board sought to have
16 put in place in the scoping sections is being defeated
17 and I raise it, and make no further comment.

18 I don't think, in light of what Ms.
19 Swenarchuk has said, that I should change our timing
20 for Monday, but I have to bring people in from out of
21 the jurisdiction from the north and we will do that and
22 they will be here and we'll be ready whenever the Board
23 wants us to go. That is it. We will.

24 But having said that, it seems to me
25 there is some obligation on parties to inform the Board

1 and parties most likely to be affected by it of a
2 realistic time estimate when they can and of the
3 documents they intend to refer to, and there has been
4 an effort by a great many people to do that but it
5 isn't always the case and it's extremely difficult.

6 And I raise it and point it out only
7 because of the experience. Again last evening there's
8 been some discussions among counsel of the OFIA/OMIA
9 and our concern about arranging the timing of all of
10 this and there's a good example of it again.

11 So, I offer that in an effort to be of
12 assistance and I invite, I suppose, comment of others
13 if they feel that appropriate.

14 MADAM CHAIR: Thank you, Ms. Cronk, but
15 we are not going to enter that discussion now, but Mr.
16 Martel and I intend to say something about scoping and
17 we have yet to make public our response to the proposal
18 by the parties in terms of the draft negotiations and
19 that schedule and I think perhaps we should set aside
20 an evening next week at five when we will discuss these
21 matters and the parties can make submissions.

22 MS. CRONK: I have been unaware of that.
23 Thank you.

24 MS. SWENARCHUK: Madam Chair, with regard
25 to that schedule discussion, may I just inform the

1 Board that I cannot be available at any day next week
2 because of previous commitments. I'm out of the city
3 after five o'clock. If it could be another day --

4 MADAM CHAIR: Yes, Mr. Martel and I will
5 talk about that at the lunch hour.

6 We will be back here at quarter to two.

7 MR. FREIDIN: Madam Chair, again, as a
8 matter of procedure, does that mean that we'll hear the
9 outline of Forests for Tomorrow's case on the 15th of
10 the month during normal sitting hours then? Because
11 that was one thing I think we scheduled for the 15th.
12 I assumed that that would have been after five o'clock
13 but I wouldn't want to, I think, lose the opportunity
14 to be advised of that matter and have that put off for
15 another week.

16 MADAM CHAIR: Ms. Swenarchuk, why don't
17 you look over your calendar at the lunch hour and we'll
18 see what is scheduled next week.

19 MS. SWENARCHUK: Thank you.

20 Thank you, Mr. Freidin, for reminding me
21 of that. I was going to raise it with the Board and,
22 if anything else, perhaps provide the outline by
23 correspondence prior to the 15th.

24 MADAM CHAIR: I think that would be
25 satisfactory if you've got a written outline to the

1 parties, and if there was a need to discuss it we could
2 meet the week after or whenever to do that.

3 MR. FREIDIN: If that is the only option,
4 yes. I'm saying there may be a number of questions I
5 may want to ask and the sooner I get the answer the
6 better. It's something that my client has been
7 awaiting for sometime so we can prepare ourselves.

8 MADAM CHAIR: Ms. Swenarchuk, perhaps you
9 can inform the Board this afternoon when you think you
10 can distribute a written outline to the parties.

11 MS. SWENARCHUK: Yes.

12 ---Luncheon recess at 12:15 p.m.

13 ---On resuming at 1:50 p.m.:

14 MADAM CHAIR: Please be seated.

15 MS. SWENARCHUK: Madam Chair, relative to
16 your question this morning about my providing an
17 outline or, as I recall the order schedule delivery
18 witness statements, if it would be helpful to the Board
19 I could be here on Monday during the day.

20 Now, I don't know what time the Board
21 intends to start this Monday. I thought that the
22 intention would be on Mondays to start later in the
23 morning.

24 MADAM CHAIR: Yes, we are starting at
25 8:30 this Monday.

1 MS. SWENARCHUK: Since I can't be here
2 after five next week or would you like me to come on
3 Monday?

4 MADAM CHAIR: Yes, why don't you come on
5 Monday, and will it take any longer than 15 minutes?

6 MS. SWENARCHUK: I wouldn't think so.

7 MADAM CHAIR: Why don't you come in about
8 11:30 on Monday.

9 MS. SWENARCHUK: Fine.

10 Before I go on, I want to be sure of the
11 question that I thought I had asked this morning, but I
12 think I didn't; that is:

13 Q. I would like each of the four of you
14 managing FMAs to tell me whether within your FMA
15 structure there is a provision for payments to the
16 company for the use of block or stripcutting for
17 natural regeneration purposes.

18 Mr. Waddell?

19 MR. WADDELL: A. A provision within our
20 FMAs for payment for block or --

21 Q. Stripcutting for natural
22 regeneration.

23 A. Not to my knowledge.

24 Q. Mr. Squires?

25 MR. SQUIRES: A. Not to my knowledge.

1 Q. Excuse me. Are you indicating then
2 that to your knowledge, within your FMAs, there are no
3 such payments?

4 MR. WADDELL: A. Yes, that is what I'm
5 indicating.

6 Q. Mr. Squires?

7 MR. SQUIRES: A. That is what I'm
8 indicating.

9 Q. Mr. Ferguson?

10 MR. FERGUSON: A. There is no such
11 provision in our FMAs.

12 Q. Mr. Gemmell?

13 MR. GEMMELL: A. There is no such
14 provision.

15 Q. Thank you.

16 Now, Mr. Nicks, going back to Case Study
17 B, we discussed this morning the intensity of these
18 treatments and the cost as reflected in the response to
19 interrogatory. This is really a stand conversion
20 project; is it not, species conversion?

21 MR. NICKS: A. Certainly for the poplar
22 working group it would involve a change of working
23 group to jack pine for portions of the case study area
24 which were jack pine working group. It would simply be
25 the perpetuation of that work. The other point I would

1 make is we made in our case study that we anticipate an
2 aspen component to remain in the stands.

3 Q. Now, given the cost and the intensity
4 of the treatments required in this kind of management,
5 do you expect to apply this type of management to
6 considerable areas within your FMA areas?

7 A. No. I think I've outlined to the
8 Board our expectation of 20 to 25 per cent of our site
9 prepared area being treated in this fashion.

10 Q. And --

11 MR. WADDELL: Excuse me. May I add
12 something to that, Ms. Swenarchuk?

13 A. In the draft ground rules that we
14 have just negotiated with the MNR for a period '90 to
15 '95, the amount that we can do is capped at 25 per
16 cent.

17 Q. And would you have an approximation
18 of the area that that involves in hectares or that you
19 would expect it to involve?

20 A. I would have to go to the graph that
21 we showed yesterday for 1988 and work back from there.
22 It would be no problem to get. I just don't have it in
23 my head right now.

24 Q. Perhaps you would like to look at --

25 MR. NICKS: A. Figure 8.

1 MR. WADDELL: A. I would say somewhere
2 in the 15- to 1600 hectare per year on the upper and
3 lower Spanish.

4 Q. Now, to your knowledge, why is that
5 capped in your current FMA ground rules or draft ground
6 rules?

7 A. I wasn't privy to the actual
8 negotiations this year. I would ask Mr. Nicks if he
9 could answer that as he sat in on some of the
10 discussions.

11 MR. NICKS: A. I point out that I only
12 sat in on some of the discussions. Those types of
13 negotiations are handled by our forest management
14 supervisor in Espanola.

15 The recollection that I have or the
16 rationalization I would give is that through an
17 internal study in terms of how much regeneration we
18 need to perform now to provide for our stated wood
19 supply target 70 years hence, we determine that that is
20 the level of heavy site preparation that we need to
21 accomplish, and presumably in an atmosphere of
22 constrained funding the Ministry of Natural Resources
23 was happy to hear that.

24 Q. And was that 15- or 1600 hectares on
25 one FMA?

1 MR. WADDELL: A. No, it's on the upper
2 and lower Spanish Forest combined, which is what they
3 are talking about here.

4 Q. Could we go back now to Exhibit 68
5 and page 68, and that's the fifth-year review.

6 A. Could you repeat the pages, please.

7 Q. Page 68 also.

8 A. Page 68. Thank you.

9 Q. Now, Table 3 on that page sets out
10 totals of the harvest cut areas, that is, and cost.
11 I'm looking now at areas of the harvest cut and the
12 regeneration techniques and we see that the cut was
13 about 11,460 hectares. The total regeneration was --

14 MS. CRONK: Sorry, what was the last
15 number?

16 MS. SWENARCHUK: 11,460 hectares.

17 Q. The total regeneration -- it's about
18 half-way down the column, down the table, the left-hand
19 column -- was 4,418 hectares.

20 Now, we also see that there was no strip
21 or seed tree cutting done, that's in the same column,
22 but there is a total of natural regeneration of 207
23 hectares. I wondered what type of treatment, if any,
24 was applied to those 207 hectares.

25 And my second question, which you may

1 want to consider at the same time, is this: My
2 subtraction, which we've already discovered isn't very
3 good but I think it's right here, leaves a different in
4 cut and regeneration of 7,042 hectares. And I'm
5 wondering what was done with that area? Was it left
6 for natural regeneration? Is this what was considered
7 untreatable? Could you help us with that?

8 MR. WADDELL: A. Yes. I'm not sure I
9 can answer your second question as to what that 207
10 hectares constitutes. I'm unclear in my own mind
11 exactly what it is.

12 I'll try and answer the first, or the
13 latter part of your question dealing with the
14 relationship of the total regeneration effort to the
15 total harvest cut.

16 This table includes only the company's
17 regeneration efforts. It does not include the
18 Ministry's. Our agreement was signed in August of 1980
19 which was too late to carry out any appreciable amount
20 of regeneration work in 1980, so it was really 1981
21 before we got into any work.

22 And as has been explained to the Board in
23 the first year of the regeneration program in terms of
24 the planting, for example, the Ministry was responsible
25 for 75 per cent of the planting and the company 25 per

1 cent, and then in the second year it increased so that
2 it took five full years for the company to actually
3 completely phase in to doing the full renewal program
4 and the Ministry to phase out so to get a true picture
5 to compare the actual amount of silvicultural work
6 carried out on the area for that five-year period you
7 would also have to have the Ministry of Natural
8 Resources regeneration efforts during that same period
9 and add them on to ours, and I haven't got that
10 information.

11 Q. I realize you don't have it with you.
12 Is it available to the company? Can it be produced?

13 A. I would think so.

14 Q. I'll ask you then to investigate
15 whether it's available and if it is available to
16 provide me with the information.

17 MS. CRONK: May I be clear? That is the
18 extent of renewal efforts by the Ministry of Natural
19 Resources for the companion period in this table?

20 MS. SWENARCHUK: Q. Or my question more
21 specifically is: What was done in relation to the
22 7,042 hectares that are the difference between the cut
23 and regeneration efforts which Mr. Waddell says would
24 accompany.

25 MR. WADDELL: A. You will appreciate, of

1 course, that we are not talking the same time period
2 here, that that harvest cut and the renewal area do not
3 coincide -- they don't coincide in the sense of the
4 same time period as some of the area that we would be
5 treating was cut prior to 1980, and that makes
6 comparing the figures very difficult.

7 We are comparing apples and oranges here
8 in trying to match the harvest cut against the total
9 regeneration program. Some of the area, for example,
10 treated in 1980 would have been cut in 1978.
11 Similarly, there is also NSR lands in here that were
12 treated.

13 Q. But the harvest figure, though, is
14 for those five years, is it not?

15 A. No. Excuse me, yes, it is. It's for
16 the 1980 to '85 period, but some of those -- for
17 example, areas treated in -- or areas harvested in 1984
18 would not have been treated in this table. They
19 probably would not have been treated until 1986 because
20 we try to leave a one-year delay in there before we
21 start our renewal treatments in many cases so that we
22 are not -- our renewal operations are not right on top
23 of the harvesting operations.

24 All I'm pointing out, Ms. Swenarchuk, is
25 the problem of trying to match our regeneration

1 hectares for that five-year period against the harvest
2 cut because they don't cover the same period of time.

3 Q. Well, my concern, Mr. Waddell, is to
4 know what treatments, if any, were used on the
5 harvested areas. And since, as you pointed out, those
6 treatments were not all done by the company, then my
7 concern is with that 11,460 hectare harvest figure, and
8 whatever information you can provide me on that, I
9 would appreciate it.

10 A. I'm sure I will be able to provide
11 you with the area treated by the MNR over the same
12 five-year period. We can certainly get that. Do you
13 wish me to see if I can find any information on that
14 207 hectares?

15 Q. I would appreciate that, yes.

16 Mr. Squires, now, turning to Case Study
17 4C in Panel 4. At the beginning of the case study the
18 abstract in small numbers, page 3, summarizes the
19 treatment that the area received. And just to
20 summarize, you will agree that there were three cuts
21 over 28 years, were there not, beginning in 1954, but
22 no regeneration efforts until 1982?

23 MR. SQUIRES: A. That's correct.

24 Q. And then there was a very intensive
25 treatment of regeneration; is that correct?

1 A. Relatively speaking, I would have to
2 acknowledge the Spruce River Forest, the level of
3 regeneration carried out on this case, that it
4 wasn't....

5 Q. And it was expensive, was it not? I
6 think your response to Forests for Tomorrow
7 Interrogatory 1A indicates the cost was \$595.83 per
8 hectare?

9 MS. CRONK: Again, at funding rates
10 provided by the MNR?

11 MR. SQUIRES: Excuse me, which
12 interrogatory number?

13 MS. SWENARCHUK: Q. Looking at Exhibit
14 1154 filed this morning and the response to 1A on the
15 front page, Case Study 4C.

16 MR. SQUIRES: A. Which interrogatory
17 number was it?

18 Q. 1A, Panel 4.

19 A. I finally have it.

20 Q. So then towards the bottom of the
21 page is the response to our question about the cost of
22 treatment on this area.

23 A. And the question is --

24 Q. Consider that fairly expensive
25 treatment?

1 A. Relative to today's terms in today
2 dollars versus the dollars at this time, yes, it is.

3 Q. Was it not relatively expensive at
4 that time as well?

5 A. That is what I'm trying to say, yes.

6 Q. Right.

7 And that figure does not take into
8 account the cost of stock which was an MNR
9 responsibility?

10 A. That's correct.

11 Q. Now, at page 4 of your study --

12 A. Page 4, Roman numeral?

13 Q. Arabic 4.

14 A. I have it.

15 Q. At the end of -- in the second
16 paragraph you, shall we say, summarized the history of
17 this site and the disturbances and harvesting that had
18 occurred, and you indicate in the last line, last
19 sentence of that paragraph:

20 "Because of this competition there has
21 been a transition with each
22 disturbance away from less aggressive
23 softwoods to a predominance of hardwood
24 species."

25 Now, would you agree that the harvesting

1 activities that occurred between 1954 and '82
2 contributed to the emergence of hardwood on the site?

3 A. I would say that any disturbance on
4 that standing site condition would have contributed to
5 the advent of hardwood. So in that sense they
6 harvested to the increase in hardwood on that site.

7 Q. Now, if the original cut or cuts had
8 been in strip or blockcuts, would you have expected a
9 higher softwood component than was in the stand at the
10 time of your regeneration efforts?

11 A. Let me see if I understand your
12 question. Would I consider modified or strip cuts at
13 the time of the initial harvest in 1954, '56, to have
14 contributed a higher level of softwood than was
15 currently there in 1981?

16 Q. Yes.

17 A. No, I would not.

18 Q. Why is that?

19 A. Because of the extreme competition
20 that would be on the ground on the cut area between the
21 strips, that I would not anticipate very much softwood
22 regeneration to have taken place.

23 I would anticipate the competition that
24 developed on or that would develop on the cut areas
25 between the strips would be identical to what developed

1 on the clearcut area.

2 Q. And the last paragraph of that
3 page -- now, when you make that response, Mr. Squires,
4 do you have in mind any particular dimensions for
5 strips, for example?

6 A. Not really. I would think the strip
7 of, say, 35 to 40 metres of the cut strip that wide
8 would probably develop this same type of vegetation.

9 Q. So even at that size, it is your
10 position that vegetation response would be the same?

11 A. Yes.

12 Q. Was the harvesting over those years
13 carried out by your company?

14 A. The harvesting between 1954 to '56
15 was carried out by what is now Abitibi-Price.

16 Q. And did your company have a licence
17 for that land previous to the signing of the FMA?

18 A. Yes, we did.

19 Q. In the period immediately before the
20 signing of the FMA?

21 A. Yes, we did.

22 Q. Now, you indicate in the last
23 paragraph of the page that during negotiations for the
24 Spruce River Forest FMA it was the company's objective
25 to return to the extent practical to former softwood

1 and mixed wood cover types to softwood?

2 A. That is correct.

3 Q. Now, why did the company not initiate
4 any action for that conversion prior to the signing of
5 the FMA?

6 A. We were not responsible for the
7 silvicultural activities on the licence.

8 Q. But presumably the company saw the
9 problem at that point and didn't just see it when the
10 FMA was signed. The problem was not being resolved.

11 Did the company not have the option and
12 was concerned about that land base to initiate some
13 silvicultural activities?

14 A. Certainly we live in a free society.
15 We have the option, I would suggest, but not being a
16 palatable option because it was not legally as such our
17 responsibility, and I don't believe the incentive
18 exists at that time, but it exists under FMA today.

19 Q. You mean the financial incentives?

20 A. No, I mean the incentive to guarantee
21 a long-term wood supply. In my opinion, that is the
22 driving force behind FMA.

23 Q. In that case, Mr. Squires, is it your
24 view that the regeneration activities of the FMA
25 holders and the extent of them would continue or will

1 continue even if the funding base is reduced?

2 A. I would have to address that as a
3 hypothetical question, and in that sense I prefer not
4 to address it.

5 Q. If the driving force for regeneration
6 activities is, in your view, a long-term tenure, then
7 are you suggesting that the financial arrangements of
8 the FMA system don't play a role in the regeneration
9 activity levels?

10 A. The senior vice president or
11 executive vice president of my company, I think, has
12 spoken to the fact that our company is currently
13 putting mines into FMA. Beyond that, I really can't
14 speak for company's intent.

15 Q. Frankly, Mr. Squires, I understood
16 from Panel 8 evidence that funding levels for these
17 silvicultural activities are very important to the
18 company and that, in fact, your witness statement,
19 Panel 8 witness statement, contains examples of changes
20 in silvicultural prescriptions due to reduced funding.
21 Surely funding plays a role in the levels of
22 silvicultural activities and the types of prescriptions
23 applied?

24 A. I think you are implying something
25 that hasn't happened. We haven't changed

1 prescriptions. Prescriptions are available and we make
2 a different choice of prescriptions.

3 Q. Yes, exactly. And, surely, it's been
4 Mr. Waddell's evidence that some of those prescriptions
5 have been the less preferred prescriptions because of
6 reduced funding levels?

7 A. That is correct.

8 Q. But is it your position that the
9 funding levels do not have a role in -- my question
10 again -- the levels and prescriptions of silvicultural
11 activities that the company has carried out?

12 A. I feel not. I know there are places
13 where we need prescriptions relative to what is in the
14 ground rules Table 1 because of the site requirements
15 and certainly we think about the funding in the sense
16 of the annual budget, et cetera, and flow around that
17 budget, but the choices are made on the basis of such
18 requirements, generally speaking.

19 Q. Does that mean that my clients could
20 take the position before the Board that funding to the
21 FMAs should be reduced or eliminated and the funds used
22 elsewhere and rest comfortably that the regeneration
23 efforts were to continue at the same level that they
24 are now and the same degree of success?

25 MS. CRONK: If my friend wishes to

1 rephrase that question I won't object to it, but as
2 framed I do. Your clients can do what they see fit.
3 The level of comfort is not something for my clients to
4 comment on.

5 MS. SWENARCHUK: Q. Mr. Squires, would
6 you be confident and would you be able to assure the
7 public so that it would be confident that elimination
8 of funding to the FMAs or regeneration programs would
9 not have a significant impact on the degree to which
10 our forest lands are being regenerated?

11 MR. SQUIRES: A. Really, Ms. Swenarchuk,
12 that's outside my area to be able to judge for my
13 company. I'm in a divisional forest capacity. I do
14 not handle the company's purse strings and budgeting,
15 and the decision is outside my capacity.

16 Q. Well, you expressed your opinion that
17 the driving force for the FMA structure is the tenure.
18 Surely as an experienced professional in the field, you
19 have an opinion about whether the funding levels play a
20 role as well?

21 A. In the sense that they support our
22 ability to guarantee that tenure, they are essential.

23 Q. "Guarantee the tenure" meaning having
24 a long-term wood supply; is that correct?

25 A. Yes. I look upon the FMA as a

1 package of responsibilities, both the company's and the
2 Ministry of Natural Resources for the Government of
3 Ontario, where we have both signed an agreement and had
4 accepted obligations, and the obligation that we see of
5 the Ministry of Natural Resources, or one of the
6 obligations, is to fund the silvicultural efforts that
7 we mutually agree to.

8 Q. And it's your position that if that
9 funding to your company was eliminated -- sorry.

10 Are you saying that you are not able to
11 comment on what the impact on your activities would be
12 if the FMA funds were omitted?

13 A. That's a fair assessment of what I've
14 said.

15 Q. Do you disagree then with the
16 sections of the Panel 8 witness statement in which the
17 Industry witnesses emphasize the importance of
18 silvicultural treatment funding?

19 A. What are we talking about
20 specifically, please?

21 Q. Well, if you could look at page --
22 starting at page 149, please, or start at page 147
23 where the witness statement refers to the task force
24 report, the task force and foresting management
25 agreements. And then it states in the second last

1 paragraph on the page that,

2 "The Industry supports and endorses
3 these recommendations and strongly urges
4 the immediate completion of the new TPP
5 and implementation schedule together with
6 an assured government funding commitment
7 for renewal of the timber resource."

8 Do you agree with that statement?

9 A. Yes, I do.

10 Q. And do you agree or do you have any
11 concern about the problem identified on the third
12 page -- third paragraph of page 149:

13 "....that a new TPP is vital
14 in this regard has been strengthened by
15 recent indications in some areas that the
16 MNR may not be in a position to
17 adequately fund the regeneration of
18 silvicultural treatments contemplated for
19 Crown lands in the area of the
20 undertaking. This has been suggested by
21 1989-1990 cutbacks in some areas for
22 silvicultural treatments."

23 And then the documentation that follows
24 afterwards to which members of the Panel have testified
25 about the use of less than preferred or other than

1 preferred regeneration prescriptions because of
2 these -- because of the seedling cap and these --
3 because of the seedling cap, yes.

4 Now, do you have a concern about those
5 problems as well?

6 A. Yes, I do.

7 Q. On page 150 and 51 we see details of
8 reductions in planned activities apparently related to
9 the cutbacks. Is that not a reflection that changes in
10 the funding level do have an impact on the regeneration
11 activities carried out?

12 A. It had an impact in the one year,
13 yes.

14 Q. And on page 151 in the last
15 paragraph,

16 "Surely the cutbacks will affect the
17 future years."

18 If you look at the fourth line at the
19 bottom of the page:

20 "For example, funding cutbacks in 1989
21 to site preparation proposals will
22 prevent sufficient areas from being
23 prepared in 1989 to meet planting and
24 seeding objectives for 1990 and so on
25 from year to year. Constraints of this

1 type have an immediate
2 impact....continuing adverse impact
3 on...."

4 Do you agree with that?

5 A. I agree in the sense that site
6 preparation reduction in 1989 would have to impact on
7 the ability to plant that area and may be negative.

8 Q. And do you agree with the statement
9 in the middle of this page, page 152:

10 "Provision of adequate government
11 funding for silvicultural treatments is
12 essential to the achievement of renewal
13 objectives and targets."

14 And then the italicized section,

15 "The reason being if a long-term
16 government funding commitment to renewal
17 is not made and other funding results,
18 this will be a direct and material factor
19 influencing the ability on the MNR and
20 the industry to adequately renew the
21 timber resource in the area of the
22 undertaking."

23 Do you agree with that?

24 A. Yes, I do.

25 Q. Mr. Gemmell, could we turn to Case

1 Study 4D, please?

2 MR. GEMMELL: A. I have it.

3 Q. And looking at the outline of the
4 case study in the Panel 4 witness statement on page 26,
5 we see a description of the methods of harvest that
6 were used on the area.

7 A. Excuse me?

8 Q. Page 26.

9 A. Of the case study?

10 Q. That's right.

11 A. I'm sorry. This is the Case Study D?

12 Q. That's correct, in Panel 4. Page 26,
13 Method of Harvest?

14 A. Okay, yes.

15 Q. So just to quickly summarize. There
16 were three blocks, Block A was clearcut, Block B was
17 shall we say patch cut and --

18 A. Block B was cut leaving groups of
19 seed trees?

20 Q. Okay. Yes.

21 And Block C was cut in alternate blocks

22 A. Alternate blocks.

23 Q. Now, would you agree with me that
24 when deciding on the layout and the size of blockcuts
25 there are a number of factors to consider for

1 maximizing the natural regeneration results?

2 A. Natural from what, seed, from
3 anything?

4 Q. I'm talking about blockcuts now.

5 A. Yes. So you are asking regeneration
6 from seed, seed only?

7 Q. Yes.

8 A. You are asking for seed only.

9 Q. If I'm looking for natural
10 regeneration--

11 A. Period.

12 Q. --to follow from a blockcut, I'm
13 going to suggest that there are a number of factors
14 that should be considered in laying out the cut; such
15 factors as the productivity of the site, whether it's
16 uplands or lowlands, drainage patterns, the forest
17 floor composition, including the types of mosses, and
18 the geography of the site. Would you agree with that?

19 A. In terms of seeding, seeding -- that
20 is what you are asking?

21 Q. Yes. In terms of attempting to
22 enhance the degree of natural regeneration which
23 results after the cut.

24 A. Yes. This was one attempt at that,
25 and I'm just trying to get that straight because I've

1 indicated that our main objective is to maintain the
2 advance growth if it's present. So there's two things
3 there. So those items that you are listing would not
4 be so important if the advance was present.

5 Q. Would they not, however, be of
6 assistance even where there is advanced growth in
7 obtaining enhanced natural regeneration results?

8 A. They would be if the advanced growth
9 was not adequate and the seeding would aid in that.

10 Q. Now, in Exhibit 1154, which was filed
11 this morning, just refer to it briefly, Forests for
12 Tomorrow Interrogatory No. 27 was directed towards the
13 size of the block and strip cuts. And without dwelling
14 on it, I'll just point out for the record that the
15 dimensions are provided there?

16 A. Yes.

17 Q. You had the opportunity to ask Mr.
18 Hopkins how those dimensions were determined, and he
19 replied -- and this is transcript from Volume 194 at
20 page 34,356 beginning at line 7, my question at line 3
21 was: "We asked for the sizes of the blocks and
22 strip cuts used in part of your case study area," and
23 the answer provided those dimensions, and my question
24 is: "How were these dimensions determined?"

25 And his answer was: "Those dimensions

1 roughly 500-feet wide by 900-foot wide
2 blocks, is roughly equivalent to the
3 historical site of the patch that's
4 allocated to a piecework cutting crew.
5 That is a two-man cutting crew with
6 chain saw and forwarding the wood with a
7 skidder. There was no -- it's an
8 arbitrary size of 500- by 900-foot and
9 the blockcut layout followed that
10 pattern."

11 Then at line 21:

12 "And what about with regard to the
13 strip cut, 264 feet by 900 feet with the
14 same criteria?"

15 And the answer was:

16 "I would only assume that it was the
17 original block layout arbitrary 500 by
18 900 feet divided into two. And this
19 would have been, as I said, the idea of a
20 Blockcuts in that time was to leave an
21 adjacent seed source and, of course, it
22 would have made that prescription --
23 would have felt that that was an
24 appropriate distance for strip wood to
25 allow pursuing it."

1 Now, you will agree with me that from
2 that description of how the dimensions were arrived at,
3 apparently there wasn't any consideration of a
4 particular characteristic of the site involved in
5 arriving at those dimensions?

6 A. Actually, the way that was arrived at
7 was originally there were trials of two chains, three
8 chains, five chains, and then we - as the experience
9 was gained with those - we ended up with four chains,
10 which I think was exactly half the normal width of a
11 blockcut, normal patch cut, and after that was looked
12 at then we went double that to the normal A chain block
13 or 500 and some feet.

14 There was a lot of different trials of
15 the different widths to establish, and at time that was
16 exactly what was being studied, the amount -- the
17 effect of the strip width for seeding on the various
18 sites. Those are low sites also that we are talking
19 about.

20 Q. So in your view, are you saying the
21 dimensions were designed for the particular site?

22 A. They were designed to test the
23 adequacy of the seed fall, yes, at the time, based on
24 the site, yes, seebeds of moss.

25 Q. They were designed to test the seed

1 fall. I see.

2 Now, at page --

3 A. Designed to test where the seed will
4 fall and establish, yes. That's what I'm saying.

5 Q. So are you saying that this width was
6 in the naturel of a test width?

7 A. These tests go back to 1971 in terms
8 of widths of strip and the effect of seed fall.

9 Q. On page 43 of the study you indicate
10 this document was obtained on various blocks?

11 A. Again, please?

12 Q. Page 43 of the study in the third
13 paragraph?

14 A. Yes.

15 Q. And you indicate that the planted
16 block, which was A, had an average stocking of 65 per
17 cent and the natural regenerating areas, B and C, were
18 at about 52.5 per cent?

19 A. Yes, I think it was 51 and 54 or
20 something like that, yes, an average.

21 Q. And I think you indicated that you
22 were, in fact, fairly satisfied with the stocking on
23 all of these?

24 A. That's correct.

25 Q. Now, looking at Exhibit 1154 again,

1 which are our Panel 4 interrogatories, we asked again
2 for the cost, Question 1A, and at the bottom of the
3 first page and turning to the second, we see the cost
4 for these treatments, Block A for site preparation,
5 planting, tending, \$405.48 per hectare; for blocks B
6 and C, tending only, at \$18.38 a hectare, and again
7 these are MNR funding figures and do not include the
8 cost of the nursery stock for Block A or the herbicides
9 403.

10 So my calculations indicate that here to
11 produce a difference of -- there's a difference of 12.5
12 per cent in stock between the implanted and natural
13 areas, but the cost for the planting was -- planted
14 area was 22 times as much as for the naturally
15 regenerating area. I think I'm right on that.

16 We simply take the \$405 and divide it by
17 the \$18.38, and basically the planting was 22 times as
18 expensive as the strip and blockcutting, and that 2200
19 per cent difference in cost produced a difference in
20 stocking of only 12.5 per cent.

21 So I'm asking whether, in fact, that was
22 a cost effective treatment on block A?

23 A. Yes, it was. You are talking totally
24 different sites, and we have already indicated that the
25 successive seeding on those uplands clay sites is very

1 poor. It was a totally different prescription for
2 those two sites.

3 There's also a very big difference in the
4 rotation expected of those two sites. Rotation age on
5 the uplands site I would expect to be somewhere between
6 60 and 80 years, hopefully to 60. The rotation age on
7 those black spruce low sites will be at least 120.

8 I think if you did a calculation based on
9 present value of that - I'm not very good in math but
10 I'm sure if you did it you would find there is quite a
11 difference in comparison - first of all, that we can't
12 do those kinds of treatments, seedlings, on the uplands
13 clay site because they are very rich and because there
14 is a lot of competition, and natural seeding is not
15 successful.

16 Q. Even with tending, with extensive
17 tending?

18 A. Absolutely.

19 Q. So you are saying that that was the
20 only potential treatment that could have been done on
21 that of site?

22 A. On the uplands site?

23 Q. Yes.

24 A. To bring it back to a crop of black
25 spruce?

1 Q. Yes.

2 A. Yes. I would say yes in terms of
3 black spruce. I think from a natural point of view,
4 you would get quite a mixed crop of trees if left to
5 natural processes.

6 Q. Now, on page 37 in the fourth
7 paragraph, you indicate that there's a trend away from
8 the strip and blockcuts I believe you were referring
9 to?

10 A. Yes.

11 Q. And that's despite the fact that --
12 my understanding is that the stocking levels you refer
13 to in that paragraph are all within acceptable
14 parameters; are they not?

15 A. Yes. May I answer that, the reasons
16 for that?

17 Q. Yes.

18 A. As I showed in the slides when I was
19 illustrating the success of those areas, my opinion is
20 that most of the growth or the -- most of the
21 regeneration of these blocks is advanced growth. It
22 was there at the time of harvest. And that was the
23 illustration I was showing in the photos where you have
24 that advanced growth pattern, small trees going up to
25 larger trees.

1 There is very little seed that is leaking
2 up that component for that success there. And I was
3 also pointing out in the slides the difference between
4 the size of a seedling from those cuts as opposed to an
5 advanced growth. Quite a difference in height. That
6 is why we say the trend is away from that type of
7 harvest because we would like to maintain that advanced
8 growth. You have 10 to 40 years' jump on the renewal.

9 Q. The trend is away from that type of
10 harvest. What kind of treatment are you now using on
11 those sites?

12 A. As we pointed out in the harvest
13 panel, I think it was illustrated that the cutting
14 process is done to maintain the advanced growth. There
15 are the other options. There are still options
16 available.

17 If the advanced growth wasn't adequate,
18 then there are alternatives which include the alternate
19 blocks or Group C or an application of black spruce
20 Group C2.

21 Q. I take it you wouldn't plant on these
22 sites; is that right?

23 A. The very lowest of sites for showing
24 off -- I indicated before there is a comparison between
25 the uplands, which is block A, down to the very lowest

1 of the sites, and in the middle there is the choices
2 that you could make.

3 Q. Now, Mr. Gemmell, we asked an
4 interrogatory with regard to road costs for these case
5 studies, and the responses are on -- again in Exhibit
6 1154, and at the third page, Question 1B. And we were
7 told that with respect to really all the case study
8 areas --

9 A. Excuse me, where are we now?

10 Q. Exhibit 1154.

11 MS. CRONK: Excuse me, Madam Chair.
12 Sorry to interrupt my friend's cross-examination.

13 Just before we go any further with this,
14 we've already been through this issue of road costs in
15 cross-examination by Mr. Hanna on the access panel.
16 There was extensive debate about it at that time.

17 I have no difficulty with my friend
18 obviously filing any response to any interrogatory that
19 we have provided, including this one, but these
20 witnesses are not here to deal with road cost
21 questions. They aren't here to deal with access
22 questions save if they are interrelated with renewal,
23 and I'm going to object for the kinds of reasons that
24 were outlined on the access panel to questions in that
25 line unless they are renewal-related. That is not why

1 these people are here.

2 MS. SWENARCHUK: They aren't exactly
3 renewal-related. There was a statement in Panel 8 at
4 some point about the need to consider renewal options
5 now in road construction.

6 MS. CRONK: Sorry, I don't recall that
7 statement. There's a discussion about what's happened
8 with road construction, bearing in mind that roads are
9 now used for renewal purposes.

10 Perhaps my friend can just clarify the
11 direction and I won't have a difficulty. I just don't
12 want to go through the debate again. It appeared on
13 the record during the access panel between Mr. Cassidy
14 -and Mr. Hanna.

15 MADAM CHAIR: How is this question
16 related to the issue of renewal, Ms. Swenarchuk?

17 MS. SWENARCHUK: It's related to the
18 question of road costs for this particular renewal on
19 this particular case study. It was not a particularly
20 complex question.

21 MS. CRONK: Well, first of all, the
22 answer in the interrogatory for this case study is that
23 there were no payments for building roads that are
24 apportioned to area treated.

25 Secondly, the issue of costing for roads

1 it seems to me has no bearing on the type of
2 operational renewal activities about which this witness
3 has testified, and I fail to see any connection, Madam
4 Chair, that would in the slightest way be useful to you
5 at all.

6 We've had the access people here,
7 including representatives that deal with this. I don't
8 want to belay things but I really fail to see how this
9 is useful, or appropriate, I might add.

10 MS. SWENARCHUK: It's one brief question,
11 Madam Chair, and that is that there has been evidence
12 before the hearing that using strip or blockcutting
13 increases road costs.

14 MADAM CHAIR: That was Dr. Methven's
15 evidence?

16 MS. SWENARCHUK: That was also presented
17 during the Ministry's case.

18 I had one brief question to Mr. Gemmell
19 arising from the response to this interrogatory, and
20 that is that it would appear from the response to the
21 interrogatory that there was no increased costs for
22 road construction for this renewal effort. That was my
23 question.

24 MS. CRONK: I object to the question,
25 Madam Chair. We had a panel of access witnesses here

1 who were the experts on that who knew all the details
2 of each of the case studies with respect to access and
3 roads issues.

4 There was cross-examination, opportunity
5 available to my friend and her co-counsel, could have
6 been dealt with then. This is not the man to whom this
7 question should be put and it has nothing to do with
8 renewal. I'm sorry, I have to formally object to the
9 question.

10 MS. SWENARCHUK: With respect, of course,
11 it has to do with renewal. It's a question
12 specifically having to do with whether this particular
13 approach to renewal increased the road cost. If
14 Mr. Gemmell does not have the information to respond to
15 the question, he can simply tell us that.

16 The Board will recall that during
17 previous panels in the Ministry case, there was a
18 recognition by the parties to the hearing that these
19 issues are all inter-related, that the emphasis on each
20 panel should be, of course, on the issue that was
21 squarely on that panel but that there would be some
22 inter-relationship of questions between panels.

23 I have one question to put on this issue,
24 it has to do with road costing for this specific
25 renewal treatment, and, in my submission, the question

1 is entirely proper.

2 MADAM CHAIR: Mr. Gemmell, you don't have
3 any expertise in roads?

4 MR. GEMMELL: Well, yes, I do.

5 MS. CRONK: That wasn't the basis of
6 the -- to move this along --

7 MADAM CHAIR: Let's not get bogged down
8 in this.

9 What's the question, Ms. Swenarchuk? You
10 could have asked it earlier but --

11 MS. SWENARCHUK: I agree. In my
12 estimation it was entirely proper to raise it in this
13 in Panel as well for the reasons that I've just
14 explained.

15 MADAM CHAIR: Just pose the question.

16 MS. SWENARCHUK: Q. The question is: Is
17 it correct to assume from this response that the use of
18 the block and stripcuts in this area did not result in
19 increased road costs?

20 MR. GEMMELL: A. This area was
21 relatively small, close to a main road. The roads were
22 all winter roads, therefore, the cost wasn't a great
23 cost. If this was a program that was extensive to our
24 area there would definitely be increased road costs to
25 carry out this kind of treatment.

1 Q. But for this one, you weren't --

2 A. It's a relatively small area. Yes,
3 there were additional road costs because we had to go
4 back and open up the road again to cut the wood a
5 second time. But on a very small scale, it doesn't
6 mean a great deal in our camp operation. If it were a
7 normal method of harvesting throughout our camp area,
8 then the cost would be significantly more.

9 MS. SWENARCHUK: What is our schedule for
10 breaks this afternoon?

11 MADAM CHAIR: Yes, we'll take a break now
12 until three.

13 ---Recess at 2:48 p.m.

14 ----On resuming at 3:05 p.m.:

15 MADAM CHAIR: Please be seated.

16 MS. SWENARCHUK: Q. Mr. Waddell, I
17 believe you testified yesterday to differences between,
18 or concerns that the Industry has with regard to
19 regeneration on Crown management units. And looking at
20 page 30 now of the Panel 8 witness statement, and just
21 to summarize: The indication on that page is that FMA
22 lands now constitute 45 per cent of the productive
23 forest land, which presumably means that
24 nontreatable-FMA lands, Crown management units and
25 company management units constitute 55 per cent of the

1 productive forest lands. Is that not correct?

2 MR. WADDELL: A. I would think so.

3 Q. And in your chart on page 72 taken
4 from the FMA Task Force Report, we see the difference
5 between the level of regeneration efforts on FMA lands
6 as opposed to nontreatable-FMA lands.

7 Now, if you look at page -- section --

8 MR. FREIDIN: On what page and what
9 document is that last reference?

10 MS. SWENARCHUK: Page 72 of this
11 document.

12 MR. FREIDIN: Page 72 of?

13 MS. SWENARCHUK: Panel 8 witness
14 statement.

15 Q. Now, if we look at Section 4, if I
16 can find it, of your witness statement, with regard to
17 renewal activities on Crown management units, I think
18 the point of that chapter could perhaps be taken from
19 the line on page 43 indicating that the Industry is of
20 the strong belief that CMU lands must be managed to the
21 same standards as the FMA lands if meaningful short or
22 long-term renewal timber resource is to be achieved.

23 Now, are you aware of the standard
24 established in the Crown Timber Act for the management
25 of lands under forest management agreements, the

1 sustained yield requirement in the Act?

2 MR. WADDELL: A. Possibly you could
3 refresh my memory.

4 MS. SWENARCHUK: I know the Board has
5 access to this, but I think it might be useful to
6 provide copies.

7 MADAM CHAIR: What is it that we are
8 looking at, Ms. Swenarchuk, excerpts from the Crown
9 Timber Act?

10 MS. SWENARCHUK: Yes, this is an excerpt
11 from the Crown Timber Act. I'm just providing it for
12 convenience really. But Section 6 which we see on the
13 first page provides the Ministry with authority to
14 enter into a forest management agreement, and Section
15 6-1 indicates:

16 "The Ministry may enter into an
17 agreement with any person for the
18 management of Crown timber on a sustained
19 yield basis."

20 And then on the following page of the
21 excerpt which is page 12 of this publication,
22 subsection 2, the fourth paragraph on that page
23 indicates that:

24 "The expression sustained yield means
25 the growth of timber in the forest can

1 produce and it can be cut to achieve the
2 continuous approximate balance between
3 growth of timber and timber cut."

4 Now, do you understand that to be the
5 standards to which the FMA lands are being managed,
6 Mr. Waddell?

7 MS. CRONK: I'm sorry, Madam Chair, I
8 object again. I have no objection at all if Ms.
9 Swenarchuk wants to ask the witnesses their
10 understanding based on their experience and their area
11 of operations on various relevant concepts to forestry,
12 but I object to these witnesses being cross-examined on
13 interpretation of statutory provisions or their
14 understanding of terms that are clearly terms of
15 argument or statute.

16 They have not been -- they are not in
17 fact nor have they legally been qualified before you to
18 do that and it's never -- it's inappropriate, in my
19 respectful submission, that witnesses be cross-examined
20 on points of statutes unless it's based on their
21 personal experience with operating and understanding
22 the particular terms.

23 On the basis framed, I object to the
24 question.

25 MS. SWENARCHUK: We can tie this all

1 together by looking at page 25 of the Panel 8 witness
2 statement in which the witnesses quote from the stated
3 purpose of the agreements, forest management
4 agreements. And the second last line on the page
5 indicate that:

6 "These agreements are to ensure that
7 the forest on such lands are harvested
8 and regenerated to produce successful
9 crops on a sustained yield basis."

10 Perhaps, then I should ask you, Mr.
11 Waddell, what your understanding is of the sustained
12 yield basis in that paragraph in the witness statement.

13 And I just indicate, Madam Chair, it's
14 -not so particularly that I want to cross-examine the
15 witness on the meaning of sustained yield in the Crown
16 Timber Act, but rather arising from the issue that the
17 Industry has raised with regard to Crown management
18 units to contrast that duty in the Act with what the
19 Ministry considers the standard to be on Crown
20 management units, and I was about to come to that.

21 And perhaps we could just leave the
22 sustained yield question and come to the differential
23 definition that applies to Crown management units and
24 if -- Madam Chair, Mr. Martel and witnesses -- if you
25 would choose to look at the timber management planning

1 manual at page 171, the definition is there.

2 MADAM CHAIR: The definition of what, Ms.
3 Swenarchuk?

4 MS. SWENARCHUK: I'll just read it for
5 the record. There is a definition, first of all, of
6 management unit.

7 MADAM CHAIR: What page is that?

8 MS. SWENARCHUK: Exhibit 171 of the Crown
9 Timber Act - excuse me - of the Timber Planning
10 management Manual which is Exhibit 7.

11 MS. CRONK: The problem I'm having,
12 Madam Chair, is we have a list of exhibits from
13 Ms. Swenarchuk that these witness were going to need
14 -and that we would need to have here today. This wasn't
15 on it. I don't have it here. The witnesses I don't
16 believe have it, they can correct me if I'm wrong.
17 Maybe my friend could just help me by reading into the
18 record the sections, at least I'll know what she is
19 talking about.

20 MS. SWENARCHUK: That was exactly my
21 intent, and I didn't put it on the list because I'm
22 only dealing with a two-line definition, which I think
23 actually counsel all focus on the problem that the
24 Industry has.

25 Do you have this manual?

1 MR. FREIDIN: They didn't say they had a
2 problem.

3 MS. SWENARCHUK: Mr. Waddell, do you have
4 the manual?

5 MR. WADDELL: I have the manual.

6 MADAM CHAIR: Ms. Swenarchuk, before you
7 give the definition, could you just tell the Board
8 where the question is going to?

9 MS. SWENARCHUK: The Industry has
10 identified in the witness statement its concern with
11 the level of renewal operations on Crown management
12 units.

13 If we look at the definition of Crown
14 management units as the Ministry has defined them, it
15 appears to me that the definition is clearly different
16 from four sets of different standards for management
17 than the standard that is set in the statute for the
18 management of forest management lands, forest
19 management agreement lands, and that is the issue I
20 wanted to explore with Mr. Waddell.

21 In other words, I think we may have quite
22 a fundamental problem here with regard to whether we
23 can expect the Ministry to commence management to the
24 same standard when, by their own definition, Crown
25 management units -- and we'll read it again:

1 "Formed from unlicenced Crown lands and
2 licenced areas are too small to permit
3 sustained yield operations."

4 MR. WADDELL: Where are you reading that
5 from, please?

6 MS. SWENARCHUK: We have, first of all,
7 the definition of sustained yield under the Crown
8 Timber Act as it applies FMA's.

9 Q. Now, Mr. Waddell --

10 MS. CRONK: I'm sorry.

11 MS. SWENARCHUK: Believe it or not, I'm
12 attempting to be of assistance to the Ministry with
13 this line of questioning.

14 MS. CRONK: Before you put your question
15 of assistance or otherwise, may I just make two points,
16 Madam Chair.

17 First, it is not the evidence before you
18 from this Panel that the Industry has a problem with
19 the management of Crown management units. That is not
20 my view of the evidence you've heard. You have heard
21 evidence they are concerned that they be managed with
22 the same standards. That is not necessarily the same
23 thing.

24 Secondly, I have no difficulty again with
25 my friend putting any questions to these witnesses

1 based on their own personal experience or operation or
2 understanding.

3 I do have a problem if she is going to --
4 through questions and answers, try to engage in a form
5 of legal argument, and if she thinks there is a
6 difficulty legally because of a statutory definition
7 with management to a particular set of standards, that
8 is a matter for her to argue before you at the
9 appropriate time.

10 So I say only that as a prelude. I
11 will object to the Board until I hear the specific
12 questions, and there may be no cause to object, but I
13 do make those two points.

14 MS. SWENARCHUK: Q. Mr. Waddell, now
15 looking on page 171 of the Timber Planning management
16 Manual at the definition of management unit, and
17 specifically at the definition of Crown management
18 units:

19 "Formed from unlicenced Crown lands and
20 licensed areas too small to permit
21 sustained yield operations."

22 Now, that suggests to me, Mr. Waddell,
23 that it is the Ministry's view that these lands, as
24 they say, are too small to permit sustained yield
25 operations and that therefore, although the Industry

1 has a concern that these lands be managed in the same
2 standard as the FMA lands, that the Ministry considers
3 really that it's not possible, that these are lands
4 which can't be managed at a level of sustained yield
5 operation?

6 MR. WADDELL: A. Are you asking me to
7 interpret what the Ministry thinks about Crown
8 management units?

9 Q. Is that not what appears from the
10 definition, Mr. Waddell?

11 A. Well --

12 Q. Let me put the question this way: Is
13 the Industry witness statement suggesting that this
14 standard, as defined by the Ministry through Crown
15 management units, needs to be changed?

16 MS. CRONK: What standard?

17 MS. SWENARCHUK: The standard of not
18 managing on the sustained yield basis.

19 MR. FREIDIN: That presupposes, does it
20 not, managed on a sustained yield basis and the witness
21 already did not acknowledge that?

22 MR. WADDELL: I'm sorry. I've lost
23 track.

24 MADAM CHAIR: I think I've come to a
25 standstill here, Ms. Swenarchuk. The evidence that the

1 Board remembers with respect specifically to CMUs being
2 managed to some renewal standards similar to FMA -- I
3 think it was Mr. Murray's evidence with respect to the
4 dependence of sawmills in the Great Lakes/St. Lawrence
5 Forest on timber provided by CMUs.

6 Perhaps we could put some practical
7 questions to him, but I don't think that's what you are
8 getting at. What you are getting at is that you are
9 trying to tell the Board that the Industry is going to
10 need some sort of a change in the definition of terms
11 and legislation policy to accommodate that sort of
12 thing. I don't think Mr. Waddell can answer that
13 question.

14 MS. SWENARCHUK: What I'm suggesting to
15 do, Mr. Waddell, is quite a fundamental problem here.
16 The difference in approach to management of these units
17 between what the Ministry definition suggests and what
18 the Industry, in my view, is advocating in its witness
19 statement.

20 MADAM CHAIR: That's fine.

21 MR. FREIDIN: I don't think Mr. Waddell
22 is the person is charged with the responsibility of
23 sorting that out. He's simply saying they relied to a
24 certain extent on timber from CMU. The Board expects
25 him to answer and develop a strategy as to how that

1 would be changed. I don't know where we can go with
2 this question.

3 MR. WADDELL: May I be permitted to --

4 MS. SWENARCHUK: Jump in.

5 MR. WADDELL: Our reading of the
6 definition of this is different than yours, Ms.
7 Swenarchuk. We read it as "Crown management units
8 formed from unlicenced Crown lands" -- and you could
9 stop right there but then it says, "and licenced area
10 too small to permit sustained yield operations."

11 And we relate that "area too small to
12 permit sustained yield operation" as being a number of
13 small licences within the overall Crown management unit
14 itself. But the Crown management unit is -- from my
15 days in working with the Ministry of Natural Resources,
16 we always considered that they were self-supporting
17 units and they were on a sustained basis -- managed on
18 a sustained basis, the allowable cut calculation the
19 same as a company management unit.

20 MR. FREIDIN: That was the evidence of
21 Dr. Osborne in Panel 3 of the Ministry's case and there
22 was cross-examination on that by this party as well.

23 MR. WADDELL: Having said that, it's
24 still our evidence we wanted to see those units managed
25 at the same standards at the FMAs, and I can't speak to

1 whether they are or are not --

2 MS. SWENARCHUK: Is it your view they are
3 not managed at this time by the --

4 MR. WADDELL: I have no access to figures
5 on Crown management units, Ms. Swenarchuk.

6 MS. SWENARCHUK: Q. Does your Chapter 4
7 in your witness statement and your advocacy of the same
8 standards of management, on the same units on the Crown
9 management units as on FMAs, does this reflect a
10 concern on your part with regard to management on these
11 units at this time?

12 MR. WADDELL: A. Again, I would ask you
13 to repeat the question, please.

14 Q. You've indicated in Section 4 of your
15 witness statement the degree to which wood supply from
16 these units is important to FMA holders?

17 A. Yes.

18 Q. And you advocated that Crown
19 management lands be managed to the same standards as
20 forest management agreement areas?

21 A. Yes.

22 Q. Is the Industry concerned that that
23 is not occurring at this time?

24 A. Yes, I think we are concerned in the
25 sense that we don't know. For example, until recently

1 the Crown management units were not under the same
2 timber management planning process as were the FMAs, so
3 in that sense they may or may not have been managed to
4 the same standard.

5 They are under the same management
6 planning requirements now as the FMAs are, but, yes, we
7 are concerned because of the importance of the Crown
8 management units in the overall fibre supply picture
9 for Ontario, but we really do not know to what standard
10 they are being managed and that is the reason for our
11 concern.

12 Q. In that response you are responding
13 for the OFIA/OLMA, are you, and not simply for your own
14 company; is that correct?

15 A. I was responding on behalf of
16 OFIA/OLMA, yes, but I can add a similar note on behalf
17 of our own company: We do not know how the surrounding
18 Crown management units -- to what level they are being
19 managed.

20 Q. There is another type of management
21 unit in the province, is there not, Mr. Waddell? There
22 are company management units as well?

23 A. Yes, there are.

24 Q. And is it your view that they also
25 should be managed to the same standard as Crown

1 management units and FMA areas?

2 A. Yes, they should.

3 Q. To your knowledge, are there any
4 management unit standards at this time?

5 A. Again, I'm sorry, I have no
6 involvement with company management - with company -
7 what you do call it, company management units?

8 Q. Yes.

9 A. Yes, I have no personal knowledge of
10 company management units. There are none within our
11 area, northeastern Ontario, that I'm aware of.

12 Q. Does any other witness have an
13 opinion on this question?

14 MR. MURRAY: A. Ms. Swenarchuk, yes.

15 The Algonquin Forestry Authority are operating under a
16 company management unit. I did deal with them in my
17 capacity as manager in the Huntsville Mill of Weldwood
18 of Canada.

19 I have been in touch with the people
20 there and talked to them about forestry matters, and it
21 is my opinion that they are being managed to a level of
22 the FMA.

23 The difference, as you know, is that
24 renewal is the responsibility of the Ministry on a
25 company management unit, but in the Algonquin Forestry

1 Authority they operate on a forest management -- not
2 agreement -- regeneration agreement to fulfil the
3 regeneration requirements.

4 Q. Given that that is a unique entity
5 that operates only in Algonquin Park, do you have any
6 information about company management units other than
7 that one?

8 A. No, I don't.

9 Q. Could we turn now, Mr. Waddell, to
10 page 56 of the witness statement and following, and
11 here you are discussing factors that influence the
12 choice of renewal options.

13 MR. WADDELL: A. Ms. Swenarchuk, I can
14 try to answer that question if you wish, but this was
15 not my section.

16 Q. Whose section was it?

17 A. Mr. Squires.

18 Q. Mr. Squires?

19 MR. SQUIRES: A. Yes.

20 Q. Now, turning to page 57, Mr. Squires,
21 and item 8 in regard to the silvicultural system and
22 harvesting method, you've indicated starting at about
23 the fifth line of that section that:

24 "For example, when natural regeneration
25 is the objective, modified cutting

1 systems are sometimes employed. In these
2 circumstances, harvesting to preserve
3 advanced growth can enhance natural
4 regeneration as, for example, in black
5 spruce."

6 Now, would not harvesting in block and
7 stripcuts be a method as well of integrating harvesting
8 renewal and fostering natural regeneration in certain
9 areas?

10 A. You are asking me about block and
11 stripcuts relative to modified cutting system?

12 Q. Yes.

13 A. Which it is a part of --

14 Q. Yes, I notice that the use of block
15 or strip cuts is not identified as the type of modified
16 harvest system, and I'm just suggesting to you or
17 requesting: Would you agree that that is also a
18 silvicultural method that can be used to enhance
19 natural regeneration on some sites?

20 A. On the correct site, yes.

21 Q. And further in the same paragraph, we
22 see that this is about eight lines from the bottom:
23 "Full-tree logging reduces the amount
24 of slash left on-site after harvesting
25 and hence may permit a less intensive

method of mechanical site preparation."

Does it not, however, also reduce the amount of natural seed available to regenerate the area?

A. Could you rephrase that question, please? I was trying to read with you.

Q. Have you had a chance to read the sentence on full-tree logging?

A. "Full-tree logging reduces the amount of slash left on-site after harvesting and hence may permit a less intensive method of mechanical site preparation."

That is the sentence?

A. Yes.

Q. Yes. And my question is: Is it not also the case, however, that full-tree logging can make natural regeneration less possible by removing seed from site?

A. I would think on some sites what you would get is that you would get some pluses and some minuses; that -- let's take a black spruce lowland site condition where you -- as already has been stated by Mr. Gemmell. If you were to leave the logging slash on-site with the cones, the slash itself may be an impediment to the regeneration.

1 On the other hand, if you take it off you
2 can have a larger area of seedbed and seed coming on to
3 the site and can then be of higher benefit relative to
4 the slash being there. It would have more seedbed
5 available and a smaller number of seed would have the
6 same stocking.

7 Q. Would you agree this would vary from
8 site to site, whether the effect of removing the seed
9 which is - is removed when the slash is removed - is
10 positive or negative with regard to providing seed
11 sites for regeneration?

12 A. On a jack pine site where, in our
13 experience, it's difficult to get reliable natural
14 regeneration of jack pine, I think you would have to do
15 site preparation.

16 In that case, the absence of the logging
17 slash becomes an advantage. The additional application
18 of seed to reduce your risk for regeneration becomes,
19 in my opinion, an improvement.

20 Maybe I didn't quite answer your
21 question. That seed is removed from the site, but it
22 may have been, probably would have been, to little
23 advantage in my experience, due to need to site
24 preparation and additional application of seed to
25 reduce the risk of failure for jack pine.

1 Q. What about black spruce?

2 A. On that same jack pine site? I
3 wouldn't look to black spruce.

4 Q. And uplands black?

5 A. In an uplands black spruce site?

6 Q. Right.

7 A. I would think that it would be
8 similar to lowland sites in the sense that the slash
9 still impediment to the natural regeneration of black
10 spruce and very little regeneration comes from seed in
11 the slash. The regeneration -- natural regeneration of
12 black spruce tends to come from seeds coming on to the
13 cut-over area.

14 Q. Mr. Squires, do you have any
15 information about whether site preparation and planting
16 activities have occurred in provinces other than
17 Ontario?

18 A. Whether or not they have occurred?

19 Q. During the 1980s, whether they have
20 increased.

21 MS. CRONK: Sorry?

22 MR. SQUIRES: Yes.

23 MS. CRONK: Excuse me. Go ahead.

24 MR. SQUIRES: I have experience in the
25 Province of Newfoundland, yes, it has increased on

1 their own company timber limits, licences.

2 MR. FREIDIN: I'm sorry, Madam Chair, I
3 missed the first part of the question. I'm not sure
4 what it is that they are talking about that has
5 increased, and perhaps I can clarify it for my benefit.

6 MS. SWENARCHUK: My question is whether
7 the witness has information as to whether site
8 preparation and planting efforts have increased in
9 other provinces of Canada besides Ontario.

10 MR. FREIDIN: Thank you.

11 MS. SWENARCHUK: And Mr. Squires is
12 saying that to his knowledge that is true in company
13 limits in Newfoundland.

14 Q. Would you agree with me if I put to
15 you a proposition that it has increased considerably in
16 all provinces during the '80s?

17 MS. CRONK: I'm sorry, I object, Madam
18 Chair. There is nothing before you to suggest that
19 these witnesses are qualified to answer that question.

20 Ms. Swenarchuk is going to have an
21 opportunity to lead her own case and her own witnesses
22 and if she has someone who is an expert across Canada
23 on these practices, she can lead that evidence directly
24 before the Board.

25 I'm not aware that these witnesses have

1 background sufficient in a cumulative sense. Some of
2 them do have experience in individual other provinces
3 but they are not cross-jurisdictional people and they
4 are not before you in that way.

5 MS. SWENARCHUK: Madam Chair and Mr.
6 Martel, these witnesses are senior managers in the
7 industry that is extremely prominent across the
8 country. If they do not have the information in which
9 to respond to the question, I'll leave the question
10 there.

11 My assumption would be based on some such
12 things as professional memberships in national
13 organizations, et cetera, that they would have this
14 type of information. If they don't, we'll leave the
15 question. I don't consider the question improper and I
16 think it would be of assistance to the Board if the
17 matter could be identified.

18 MS. CRONK: I'm sorry. The question is,
19 is it on the rise across Canada? In what province, in
20 what respect, in what activity? Sure, I expect that
21 each of these witnesses could offer an opinion on it so
22 could everyone in the room.

23 I just don't think it's going to be
24 terribly useful to the Board unless their opinion is
25 grounded in some personal, professional experience or

1 some personal knowledge. In my respectful suggestion
2 to you, it's not at all an appropriate line of
3 questioning.

4 MS. SWENARCHUK: I can provide a
5 publication which suggests details and the witnesses
6 could indicate whether they have the information to
7 agree with the publication or not.

8 MADAM CHAIR: Then we would have to take
9 a break, Ms. Swenarchuk. They haven't seen it, have
10 they?

11 The Board doesn't know how useful that
12 kind of a survey of these witnesses is going to be to
13 us.

14 MS. SWENARCHUK: Madam Chair, I think the
15 usefulness is in identifying the -- in assisting in
16 identifying the reasons for the increased regeneration
17 activities in Ontario, and it would be our evidence,
18 and I think it would be useful to do it now -- if Ms.
19 Cronk insists we'll wait until our own case -- that in
20 fact funding resources for regeneration efforts have
21 increased nationally in the '80s and that that is a
22 beneficial -- that has had a beneficial effect on
23 regeneration efforts in Ontario as in our provinces.
24 If these witnesses aren't in a position to confirm
25 that, we can leave it for a later time.

1 MADAM CHAIR: Do any of the witnesses
2 want to tackle this question? Do you know something
3 about the funding provided in other jurisdictions in
4 Canada and do you have personal experience with
5 planting and all other types of regeneration that may
6 or may not be on the increase in other jurisdictions?

7 MR. GEMMELL: (Nodding negatively)

8 MR. FERGUSON: (Nodding negatively)

9 MR. NICKS: (Nodding negatively)

10 MR. MURRAY: (Nodding negatively)

11 MR. WADDELL: (Nodding negatively)

12 MR. SQUIRES: (Nodding negatively)

13 MADAM CHAIR: No. I guess you are not
14 going to get an answer, Ms. Swenarchuk.

15 Ms. Swenarchuk, sorry to interrupt your
16 cross-examination, but Mr. Martel and I are wilting
17 fast up here. I don't know how everyone else is doing.

18 Did you think you are going to be
19 finished today? You don't have to tell me to the
20 minute but --

21 MS. SWENARCHUK: That turn of events may
22 shorten my cross-examination considerably. It would
23 take some reorganization to do that and I obviously
24 can't answer the question.

25 MADAM CHAIR: When you are ready for a

1 break -- we are going to need another break before
2 5:00. When you are ready please let the Board know.

3 MS. SWENARCHUK: I'm wilting, too. It's
4 very warm.

5 MADAM CHAIR: Would you like to take a
6 10-minute break now or would you prefer to wait until
7 four? I don't want to interrupt what you are doing.

8 MS. SWENARCHUK: Yes, we'll take a break.

9 MADAM CHAIR: Ten minutes. All right.
10 Thank you.

11 ---Recess at 3:45 p.m.

12 ----On resuming at 4:07 p.m.:

13 MADAM CHAIR: Please be seated.

14 Ms. Swenarchuk?

15 MS. SWENARCHUK: Q. Mr. Waddell, would
16 you please turn to Exhibit 940, which is the report of
17 the task force of forest management agreements. You
18 were a member of that task force, I understand; is that
19 correct?

20 MR. WADDELL: A. Yes, I was.

21 Q. And did you participate in the
22 writing of this report?

23 A. I participated in the input into the
24 writing, not the actual writing.

25 Q. Are you familiar with the contents?

1 A. I believe so.

2 Q. And did the contents reflect your
3 opinions fairly or are there elements of it that you
4 don't agree with?

5 A. There are no essential elements with
6 which I do not agree. There are some minor variations,
7 but there are no essential elements.

8 Q. Could we turn to page 24 then,
9 please, with regard to the impacts of FMAs on Crown
10 management units.

11 A. Sorry. Did you say page 24?

12 Q. 24.

13 A. I have it.

14 Q. Now, the third paragraph on the page
15 begins the discussion of some of the problems as
16 between CMUs and FMAs. It is obvious that MNR takes
17 its FMA contractual obligation seriously:

18 " FMA has received preferential
19 treatment over the Crown units with
20 regard to funding, stock allocations and
21 protection from end year spending cut
22 backs. Several districts reported
23 serious disparities in farming in recent
24 years between FMA and for important Crown
25 management units."

1 Figure 6, which is the following page,
2 illustrates the distribution of funding relative to the
3 harvest from FMA and other Crown land in northern
4 Ontario:

5 "While there appears to be a balance in
6 funding distribution up to 1986/87 on a
7 provincial basis, certain regions,
8 northwest region, reported imbalance
9 in their funding distribution."

10 Then if we look at Figure 6 on the
11 following page, we see the trend as regards to harvest
12 and silvics on the FMA and non-FMA lands.

13 I don't intend to go through them in
14 detail, but then if we turn to page 25 we see a problem
15 identified:

16 "The distribution of silvicultural
17 funding since 1986/87 and the failure to
18 obtain or continue funding to Crown roads
19 has resulted in inadequate forest
20 management on Crown units."

21 And they say,

22 "This is a major problem area with the
23 deep seated cause lying in MNR
24 budgeting and priority setting process.
25 The FMA's budget request for silviculture

1 are usually fully funded while Crown
2 units budget on a diminishing base
3 usually 80 to 90 per cent of the previous
4 years levels."

5 Now, are those problems that you had in
6 mind when preparing the section of the Panel 8 witness
7 statement that discusses the need for silvicultural
8 management on Crown management units?

9 A. Can you ask me that question in a
10 different manner so I understand what you mean, please?

11 Q. Well, you were part of the task force
12 that looked at these questions and you said you don't
13 substantially disagree with anything in the report, if
14 I'm paraphrasing you correctly. I don't mean to be
15 misleading.

16 A. Correct.

17 Q. So this is a problem that was
18 identified in the report. And do you agree that this
19 is a problem?

20 A. I can't say that it is a problem as
21 of 1990. It was a problem that was identified to us in
22 the summer of 1987 when I was on the FMA task force and
23 we heard presentations from different Ministry and
24 company people across the province.

25 Q. And have you had any information

1 since 1987 that would add to our knowledge of this
2 problem as it's described in this report?

3 A. No, I've had no information as such
4 that would give us any further insight into what we
5 prepared at that time.

6 Q. Did the Industry prepare a written
7 reply to this report when it was -- after it was --

8 A. No, we did not.

9 Q. Now, would you turn back to page 12
10 in this report, Mr. Waddell, and I'm looking at Section
11 3.1.1.2, the nursery stock cap and the last paragraph
12 of the page which reads as follows:

13 "The cap on stock production was placed
14 there by MNR in an effort to bring the
15 Ministry ratio of planting and other
16 treatments into a better balance. At one
17 point, the regeneration program seemed to
18 be driven by a mushrooming production
19 of container stock."

20 Do you agree with that statement?

21 A. Yes.

22 Q. Now, the Industry has indicated in
23 the witness statement a considerable concern about
24 levels of funding for silviculture in Ontario in the
25 FMA system.

1 Do you agree with me, Mr. Waddell, that
2 issues related to funding were raised in this task
3 force report as well? For example, on page 11 with
4 regard to road revenues, that is in the last paragraph;
5 on page 13 in the second significant paragraph,
6 "funding must flow accordingly", and that is in
7 relation to the seedling cap.

8 A. I'm sorry. I've lost where --

9 Q. Let me be more clear about this. The
10 second full paragraph says --

11 A. On page 13?

12 Q. Yes.

13 Calling for a re-examination of the
14 rationale for the cap on stock production.

15 "If the outcome of this re-examination
16 indicates higher stock levels are in
17 order then funding must go accordingly
18 both to stop production and to associated
19 areas of silviculture."

20 And then there was concern also expressed
21 on that page and on the next page with silviculture
22 costs, and the problem as identified on that page is
23 that:

24 "On many FMA's, treatment rates are
25 insufficient to pay for actual company

1 costs of treatment and cost overruns are
2 no longer offset by compensation payments
3 for road construction."

4 And then there was a recommendation that
5 the MNR and agreement holders arrive at a more
6 equitable basis for the setting of treatment rates. Do
7 you agree with that recommendation?

8 A. Yes, I do.

9 Q. And to your knowledge has any action
10 flowed from that recommendation to date?

11 A. I believe the negotiating of
12 silvicultural levels of funding is still done in the
13 same manner as it was when we prepared this.

14 Q. Do you still have a concern that MNR
15 and FMA holders arrive at a more equitable basis for
16 setting rates?

17 A. Yes, I do.

18 Q. And then on page 16 of the report
19 there is a problem identified essentially that the
20 inflation factor applied to the treatment rates in the
21 agreements was not high enough and that the adjustment
22 factor -- the recommendation being that:

23 "The adjustment factor for inflation
24 reflect the rate of inflation within the
25 forestry economic sector....as it relates

1 to fuel, equipment and labour."

2 Does that remain an outstanding concern
3 in your mind?

4 A. Yes, in some areas more than others,
5 as a general statement, yes.

6 Q. Could you explain what you mean by
7 that, please?

8 A. Well, for instance, on the site
9 preparation rates, probably 80 percent of your site
10 preparation rate or the cost is the equipment cost and
11 the fuel cost. The only other component in there
12 basically is labour. And when you start out, for
13 example, in 1985 and if you have negotiated a rate that
14 is an equitable rate in 1985, that rate remains the
15 same except for the inflation factor until 1990 when
16 you have an opportunity to renegotiate it.

17 Now, if at the end of year one the real
18 inflation factor on fuel, equipment and labour, which
19 are your three major components that go into site
20 preparation equipment -- and that is where much of our
21 money is spent on-site preparation equipment -- if
22 those three major components, for example, go up by 12
23 to 15 per cent as they have in many years and even
24 more, and the average GNE price index used by the
25 Ministry to apply our inflation rate is only 3.5 or 4

1 per cent, then we have fallen behind 10 percent in the
2 first year. And each year thereafter for the full
3 five-year period, if the same process occurs, by the
4 time we get to the end of the five-year period our
5 funding level from the Ministry is significantly below
6 what it would have been and what our inflated costs
7 have been due to those three major components of fuel
8 equipment and labour.

9 Q. And does your concern on this issue
10 extend to today even though you have just been involved
11 in drafting the new FMA? Has that concern been dealt
12 with in this drafting?

13 A. The concern over the inflation rate
14 has not been -- not changed.

15 Q. So in summary would you agree with me
16 that amongst the other -- amongst the many issues that
17 the task force dealt with were issues of cost and that
18 there were a number of areas in which the FMA holders
19 were not satisfied with the level of funding that were
20 obtained?

21 A. Would you repeat the question?

22 Q. Just that in summary the task force
23 report identifies a number of areas in which FMA
24 holders have concerns about the level of funding they
25 were receiving?

1 A. Yes. If I may add, however, there
2 were two Ministry of Natural Resources people on this
3 task force and one was the chairman and the other was
4 the principal author of this document, and they also
5 shared these concerns.

6 It was not just the Industry
7 participants. These feelings expressed in this task
8 force report represented certainly the feelings of the
9 two Ministry people that were on the task force as
10 well.

11 MR. MARTEL: Could I ask a question then?
12 What was their concern or did they
13 express a concern on the fact that the amount allocated
14 to MNR itself was being further eroded by only getting
15 a portion of what they received in the previous year?
16 Did those members express any concern to you about what
17 was happening as a result of this to MNR efforts?

18 A. Yes. The Ministry members of this
19 task force were concerned about the apparent declining
20 level of funding on Crown management units. Does that
21 answer your question, sir?

22 MR. MARTEL: Yes. Thank you.

23 MS. SWENARCHUK: Q. Now, the final
24 chapters of your report to your witness statement,
25 Mr. Waddell, I think document very clearly for the

1 Board the Industry's concerns about funding, about the
2 cap on nursery stock, and, if you look at pages 150 and
3 151, the impact on renewal activities of the inadequate
4 funds.

5 And what I take from those pages is, as
6 you have identified, are reductions in renewal
7 activities that would have otherwise occurred. You
8 have given us those figures. Agreed?

9 MR. WADDELL: A. I'm sorry. Someone
10 coughed just in the crucial word there and I missed
11 that again, too.

12 Q. The final chapters of the witness
13 statement, Mr. Waddell, express the Industry's concern
14 about funding levels, does it not, and indicate that
15 reduced funding can result in reduced renewal activity?

16 A. It can in the long run.

17 Q. And you have given examples on Pages
18 150 and 151 of some of those reductions?

19 A. Yes, the reductions in '89/90 fiscal
20 year.

21 Q. Right.

22 Now, the Industry has emphasized in
23 discussions of a proposed new timber production policy,
24 that coming with it should be essentially guaranteed
25 funding for the renewal efforts for established funding

1 for the renewal efforts for the future; is that not
2 correct?

3 A. I would not necessarily agree with
4 your word "guarantee". I don't think there is anything
5 guaranteed in this world, especially funding.

6 Q. Well, on page 158 at the bottom --

7 A. Excuse me, 158?

8 Q. Yes.

9 A. Yes, I think that says, "Assurance of
10 adequate and continuous renewal funding."

11 Q. Yes.

12 Now, isn't it true, Mr. Waddell, as Mr.
13 Martel indicated yesterday, that funding for any
14 particular government activity is always in competition
15 with other demands and that it's not possible for any
16 of us to expect our particular priorities to be funded
17 in a guaranteed way in the future?

18 A. Not on a year-to-year basis, I
19 suppose.

20 Q. And isn't that particularly
21 problematic when we are talking about an activity like
22 forest renewal which occurs over long time periods and
23 on which the results are not evident for decades in the
24 future?

25 A. I wouldn't agree with your statement

1 that the results are not evident for decades in the
2 future.

3 Q. The returns perhaps?

4 A. Pardon me?

5 Q. The returns.

6 A. The financial returns from the
7 harvesting. Is that what you --

8 Q. Yes.

9 A. Yes. Yes, it's very difficult for
10 forest renewal to -- since it is a long-term
11 investment, to stand up in the -- against some of the
12 year-to-year pressures of education and social services
13 and other demands like that.

14 Q. Now, we have looked at a number of
15 case studies that the Ministry has produced for us and
16 we've looked at the costing of artificial regeneration
17 techniques, and I would suggest to you that given the
18 uncertainty of funding, that reliance on these very
19 expensive, artificial, regeneration techniques is very
20 problematic for the future, security of the wood
21 supply, and that would it not be more prudent for the
22 Industry to be attempting to develop cheaper methods of
23 regeneration relying more on artificial - excuse me -
24 on natural means of regeneration or the enhancement of
25 natural regeneration?

1 MS. CRONK: I don't object to the
2 question, Madam Chair, but I object to the suggestion
3 these witnesses indicated those treatments were very
4 expensive. The evidence was it was a comparative
5 relative thing. But apart from that, I don't object to
6 the question.

7 MS. SWENARCHUK: There were questions and
8 responses which indicated the opinions of the witnesses
9 on some of the treatments were, in fact, that they were
10 expensive.

11 MS. CRONK: I agree with that. I don't
12 agree with your characterization of the evidence. I
13 don't object to the question. It's the preludes that
14 give me a problem.

15 MR. WADDELL: I'm sorry? I think you
16 will to have re-ask the question.

17 ---Discussion off the record

18 MS. SWENARCHUK: Q. Before we come to
19 the cost question there is one other issue I did want
20 to put to you, Mr. Waddell, and that is the position
21 expressed in the witness statement that a new timber
22 production policy is necessary.

23 First of all, you indicated that the
24 forest production policy, as it was when called, of
25 1972, is no longer adequate to -- it's on page 134.

1 The 1972 policy is no longer an adequate base upon
2 which to make long-term wood supply demand in the area
3 of the undertaking.

4 First of all, why is it no longer
5 adequate?

6 MR. WADDELL: A. We feel that it was
7 formulated in 1972. This is 1990. 18 years have
8 elapsed. A lot of changes have occurred out there.
9 Purely from a time period alone it needs to be analyzed
10 to see if it is relevant.

11 Secondly, I suppose personally, I have
12 some reservations about how it was put together in
13 the -- 1972. If it involved Industry at all, it was
14 minimal involvement and we have repeatedly emphasized
15 through this Panel that we would like to be involved,
16 in fact, we feel it's imperative that we be involved in
17 the next production of a timber policy, and in the view
18 of the FMA task force and in the view of Professor --
19 or Dr. Baskerville, in his report, they both came to
20 the same conclusion that the policy needed to be
21 revised, that it wasn't particularly relevant in this
22 day and age.

23 Q. Now, you've emphasized the importance
24 of Industry participation in that process in developing
25 a new production policy. Would you not agree that

1 other forest users should be entitled to participate in
2 that process as well?

3 A. Yes, we would agree, and I believe
4 that - I believe that our proposed terms and conditions
5 in the - will speak to this. If the planning, the
6 timber management planning process that our association
7 is proposing will provide for that kind of input, it's
8 my understanding.

9 Q. But talking now about the production
10 policy, development of the production policy?

11 A. Yes.

12 Q. You would agree there as well that
13 the public should be involved in this?

14 A. Yes, we would.

15 Q. Now, let's come back to the money
16 question. From the case studies presented and from the
17 evidence overall, it appears that on the FMAs from
18 which we've heard, 60 to 70 percent of the regeneration
19 efforts being undertaken are artificial regeneration,
20 and I'll characterize that as intensive management, and
21 we've looked at some of the costs of those.

22 You will agree with me, will you not,
23 Mr. Waddell, that in most cases artificial regeneration
24 techniques are more expensive than natural regeneration
25 techniques?

1 A. Well, if I could go back to your
2 first percentage before I answer the question. I'm not
3 sure I understood you because I think you said that 60
4 to 70 per cent is being done intensively, but I'm not
5 sure if you were talking about our five case studies or
6 FMAs in general.

7 Q. I was talking about my questions to
8 each of you about your FMA areas this morning?

9 A. These particular FMAs around the
10 table?

11 Q. Yes.

12 A. I think I heard from Mr. Squires that
13 his percentage of artificial regeneration was close
14 to -- pardon me, his percentage of natural regeneration
15 was close to that percentage of 60/70 rather than the
16 way you are describing it.

17 Q. Is that correct?

18 MR. SQUIRES: A. That is correct, Ms.
19 Swenarchuk.

20 MR. WADDELL: A. I believe for the other
21 people on the table that 60 to 70 per cent was a fair
22 statement for the per cent that we are regenerating
23 intensively, if you wish to use that word.

24 Is that correct, Mr. Ferguson,
25 Mr. Gemmell?

1 MR. GEMMELL: A. That's correct.

2 MR. FERGUSON: A. That's correct.

3 I might add to that, if I may, that
4 intensively is not a term which I would concur with in
5 that approximately 50 per cent of regeneration,
6 although it is artificial regeneration on forest which
7 I'm talking about, the English River forest was in fact
8 seeding, which I do not consider to be a particularly
9 intensive form of forest management.

10 MR. WADDELL: Thank you.

11 A. We are in the same situation and we
12 would prefer to call it artificial regeneration rather
13 than intensive. Intensive has a different connotation.

14 MR. SQUIRES: A. I would like to add
15 that the figures I gave on the work that we are
16 performing this summer, approximately 40 per cent of it
17 is seeded to regeneration level.

18 MR. GEMMELL: A. I guess I better add
19 also 25 per cent of our artificial regeneration is
20 seeding areas.

21 Q. Is seeding a less expensive technique
22 than planting usually?

23 MR. WADDELL: A. Usually.

24 Q. And is site preparation for natural
25 regeneration less expensive usually than seeding or

1 seeding with site preparation?

2 A. Well, normally your seeding requires
3 site preparation in advance.

4 Q. So as a general proposition, is not
5 the enhancement of natural regeneration techniques less
6 expensive than the use of artificial regeneration
7 techniques?

8 A. As a general proposition, natural
9 regeneration is cheaper than artificial, but as our
10 Panel has repeatedly tried to convey in the past
11 several days, natural is only effective under certain
12 range of conditions, sites, species, and so forth, and
13 the forest manager uses his best judgment to determine
14 where natural regeneration will be effective and will
15 give the required degree of stocking and cost is --
16 while the -- I mean, in a perfect world if we could use
17 natural regeneration everywhere it certainly would be
18 the cheapest way to go, but there are many, many sites
19 that we cannot get the regeneration to the species we
20 want by using natural regeneration.

21 Q. Now, the Board has heard evidence
22 that about 89 per cent of the harvesting done is
23 clearcutting, and I think you agreed with me, Mr.
24 Waddell, that the harvesting referred to, generally
25 speaking in this witness statement, is conventional

1 clearcutting; is that not correct?

2 A. Certainly in the Boreal forest it is.

3 It's not in the St. Lawrence....

4 Q. Right.

5 A. What's the name of that forest,
6 St. Lawrence....

7 MR. MURRAY: A. Great Lakes/St.
8 Lawrence.

9 MR. WADDELL: A. Great Lakes/St.
10 Lawrence.

11 Q. So did I take it then that when you
12 say that natural regeneration will not provide you with
13 the species you want, you are saying that in the
14 context of natural regeneration, following the type of
15 harvest practices that are now prevalent; is that
16 correct?

17 A. No. I'm saying it in the context
18 of obtaining regeneration following any type of
19 harvesting.

20 Mr. Gemmell has given evidence, for
21 example, that on certain of his spruce sites, his
22 uplands spruce sites, that natural regeneration very
23 likely would not be possible on his rich uplands --
24 regeneration to black spruce would not be possible on
25 his uplands productive sites because of the competition

1 problem.

2 By the time the seed germinated and got
3 any growth the competition would have choked it out, so
4 that I'm not putting that statement I made in any -- in
5 the context of any type of cutting, it's just reality.

6 Q. Would you turn to page 13 of the task
7 force report, please? It's Exhibit 940.

8 A. I have it.

9 Q. And I'm looking at the last paragraph
10 of the page.

11 "It is difficult to determine the
12 correct level of silvicultural activity
13 within an FMA. The FMAs are premised
14 upon the requirement that productivity of
15 the forest be maintained if not enhanced.
16 It is becoming evident that funding may
17 not be available to accomplish this
18 unless extensive use is made of natural
19 regeneration, that it is not possible to
20 practice intensive management upon every
21 area harvested and that, indeed, the
22 best course of action, in some cases, is
23 to harvest the site and walk away from
24 it.

25 "In the interest of maintaining a

1 future wood supply, a more formal
2 approach must be taken which somehow
3 bridges the gap between attempting to
4 achieve the ultimate and failing to do so
5 and relying on extensive natural
6 regeneration."

7 Now, do you agree with that paragraph,

8 Mr. Waddell?

9 A. Just give me a moment, please.

10 Yes, I agree with it.

Q. Now, would you agree that given the on-going funding uncertainties, that an attempt to develop cheaper methods of regeneration would be a prudent course for the Industry?

15 A. Provided they are successful methods.
16 As I have tried to say before, cheapness is not -- your
17 cost is not the only component that we must look at on
18 a site when we are prescribing the silvicultural
19 treatment, and just because a form of natural
20 regeneration is the cheapest, if there is not
21 reasonable expectation of our being able to get a
22 forest back on there that will fulfill the productivity
23 of the site, then it's probably not a good investment.

24 Q. Agreed, Mr. Waddell. But, again,
25 given the continuing unsatisfactory state of the

1 funding and the degree of reliance on artificial
2 regeneration at this time, I take it you would agree
3 that if cheaper methods can be found or can be
4 utilized, they should be?

5 A. Again, providing that those cheaper
6 methods will give us a successful regeneration of those
7 lands and to a level that is acceptable.

8 I would like to add a further point there
9 and, again, say that on our own particular FMAs which
10 is -- where jack pine is the predominant working group,
11 at the present time there is no method that we are
12 aware of in natural regeneration that will give us
13 successful renewal and we must rely on artificial,
14 either be it planting or be it seeding, and the same
15 situation exists on other FMAs, two different species,
16 such as Mr. Gemmell has indicated in the uplands
17 spruce.

18 Q. On page 155 of the witness statement,
19 Mr. Waddell, you have indicated a number of research
20 and development trials being carried out by the
21 Industry. I don't see any trials there that are
22 specifically directed to natural regeneration
23 improvements.

24 A. I will ask Mr. Nicks, if you will, to
25 comment on this as this was the area that he

1 investigated for the Industry.

2 MR. NICKS: A. The list of trials does
3 not include, to my quick review - or after a quick
4 review - any natural regeneration trials, but as I
5 indicated in the witness statement, this is by no means
6 an exhaustive list.

7 There were only six companies surveyed.
8 I believe they were the first six FMA holders. We were
9 merely trying to get a glimpse of what might be going
10 on out there.

11 I would point out there are 11 trials in
12 direct seeding, which is certainly a low-cost
13 technique, many of which are directed at simultaneous
14 site preparation and seeding. In fact, we have a
15 couple in that area.

16 Aerial seeding trials at various rates,
17 modifications of Bracke scarifiers, development and
18 testing of black spruce seeding devices, development of
19 spot seeders for feller-buncher heads so that seeding
20 can be done during harvesting.

21 So although there are no natural trials
22 per se in this, as I say, this glimpse of what is going
23 out there, there are certainly a number of trials
24 directed today low-cost regen.

25 MR. GEMMELL: A. May I just add,

1 Ms. Swenarchuk, I already talked about the trials that
2 we have had in natural regeneration on our -- on the
3 Iroquois Falls Forest and it goes back many, many
4 years. It's not listed there, I suppose, because we've
5 always been doing it. It's not a special trial that
6 has come up in the last number of years. It's been
7 on-going and I did indicate that we have been doing
8 that for a long time.

9 Q. And your case study indicated that
10 there was a move away from techniques that were used on
11 blocks C and D.

12 A. The technique was away from alternate
13 strip in Group C, but not away from a natural
14 technique. Again, I'll emphasize that, and that is the
15 advanced growth method and the development of our
16 harvesting equipment is geared to that type of harvest
17 on those low sites. And that is on-going. We change
18 every year with that equipment.

19 Q. That is one example.

20 MS. SWENARCHUK: Well, subject to my
21 review of Mr. Nicks' report, Madam Chair, those are my
22 questions.

23 MADAM CHAIR: Thank you,
24 Ms. Swenarchuk.

25 MS. CRONK: Madam Chair, could I just get

1 an estimate of the time, if possible, from the Ministry
2 of the Environment and the Ministry of Natural
3 Resources, assuming that the Anglers & Hunters are half
4 a day tomorrow? I'm interested to know whether it's
5 likely these witness are going to be required to come
6 back on Monday.

7 MADAM CHAIR: All right.

8 Mr. Freidin?

9 MR. FREIDIN: I think I better go back to
10 my original three to four hours.

11 MS. CRONK: Three to four hours.

12 MR. FREIDIN: Three hours.

13 MS. CRONK: If I said it again, can I get
14 you to two?

15 MS. SEABORN: I think my original
16 estimate was two to three hours and I'll stick with
17 that estimate.

18 MADAM CHAIR: We won't be finished
19 tomorrow.

20 Thank you very much.

21 MR. FREIDIN: Madam Chair, perhaps just
22 for the record, I can't be sure of all of the exhibits
23 that I might use, but I can advise that I will use
24 probably Exhibit 513, the slides for the case studies
25 in Panel 4, some of the exhibits -- I would ask that

1 everybody bring their exhibits which were filed in this
2 Panel, Exhibit 7 --

3 MS. CRONK: Sorry?

4 MR. FREIDIN: Exhibit 7, which is the
5 Timber Management Planning Manual; Exhibit 700, which
6 are the Ministry terms and conditions; exhibit 4 which
7 is the Environment Assessment document; and the Panel 4
8 case studies.

9 MADAM CHAIR: All right. The slides,
10 were you talking about the slides in Case Study D of
11 Exhibit 1100?

12 MR. FREIDIN: 1101, is it?

13 MADAM CHAIR: Exhibit 1101.

14 MR. FREIDIN: Actually, just bring slide
15 9.4 of Case Study 4D and I think that will do the
16 trick. Slide 9.4 for Case Study 4D. I think that is
17 Mr. Gemmell.

18 MS. CRONK: Madam Chair, there is one
19 other matter that I would like to raise just before we
20 leave.

21 First of all, the Panel gave an
22 undertaking, specifically Mr. Nicks and Mr. Waddell, as
23 I recall from Ms. Swenarchuk, to obtain the details of
24 the natural regeneration component shown in the first
25 five-year review specific to E.B. Eddy, Exhibit 68.

1 Two matters with respect to that. I drew
2 to Ms. Swenarchuk's attention at the break that part of
3 the information that she required and which was subject
4 to the undertaking is, in fact, contained in the report
5 two pages at page 72.

6 With that in mind, I point that out to
7 the Board so that the Panel may be clear as to what it
8 is they have to get tonight.

9 And there was a second part to the
10 undertaking. It had to be with an explanation of how
11 two of the 207 hectares shown as having been treated by
12 the Industry, naturally, what form of natural treatment
13 was involved.

14 So I'm asking for Ms. Swenarchuk's
15 assistance as to whether, now that I've pointed out
16 Table 6 to her at page 72, the undertaking relates only
17 to the second part or is there something else that she
18 requires of the Panel in regard this evening.

19 MS. SWENARCHUK: That's sufficient.

20 MS. CRONK: That's fine. Thank you.

21 Secondly, there was an undertaking with
22 respect to Table 3 that Mr. Nicks gave concerning a
23 breakdown again with respect to the natural
24 regeneration entries, and I would ask the permission of
25 the Board, as has been given in the past, that the

1 support people here for the Panel be able to deal with
2 the witness for the purposes of getting photocopying
3 done and getting the information provided in the way we
4 are to produce tomorrow morning. That is not counsel.

5 MADAM CHAIR: Any objections from the
6 parties?

7 MS. SWENARCHUK: No objection.

8 MADAM CHAIR: Thank you, and thank you
9 witnesses and Ms. Swenarchuk and Ms. Cronk for today.
10 It's sort of difficult circumstances and lots of
11 interruptions. It will be better tomorrow.

12 ---Whereupon the hearing was concluded at 4:55 p.m.
13 to be reconvened on Thursday, May 10th, 1990 at
14 8:30 a.m.

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This is to certify that the
foregoing is a true and accurate
computerized transcription of
the proceedings to the best of
my ability and skill.


SANDRA M. NAZAREC, C.S.R.

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